72848

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Hong Liu Examiner # : _____ Date: 8/8/02
Art Unit: 1624 Phone Number 30 6-5814 Serial Number: 09/743,800
Mail Box and Bldg/Room Location: 4E01 Results Format Preferred (circle): PAPER DISK E-MAIL
4E12

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Urokinase Inhibitors

Inventors (please provide full names): Wilhelm, O Magdolen, V Sturzebecher, J

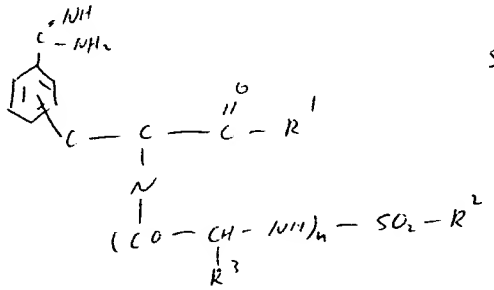
Earliest Priority Filing Date: _____

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

AUG 12 8-5127 (STIC)

Barb: please!

A method of treating urokinase associated or a urokinase receptor associated disorder using the compound.



See definitions of R' and R² in claim 19.

Point of Contact:
Barb O'Bryen
Technical Information Specialist
STIC CM1 6A05 308-4291

****

STAFF USE ONLY

Searcher: Joyce
Searcher Phone #: _____
Searcher Location: _____
Date Searcher Picked Up: _____
Date Completed: 8-14-02
Searcher Prep & Review Time: 30
Clerical Prep Time: _____
Online Time: 30

Type of Search

NA Sequence (#) _____
AA Sequence (#) _____
Structure (#) 1
Bibliographic _____
Litigation _____
Fulltext _____
Patent Family _____
Other _____

Vendors and cost where applicable

STN 329
Dialog _____
Questel/Orbit _____
Dr.Link _____
Lexis/Nexis _____
Sequence Systems _____
WWW/Internet _____
Other (specify) _____

PTO-1590 (8-01)

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=> dup rem 146,125,145
FILE 'CAPLUS' ENTERED AT 10:44:44 ON 14 AUG 2002
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FILE 'DRUGU' ENTERED AT 10:44:44 ON 14 AUG 2002
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PROCESSING COMPLETED FOR L46
PROCESSING COMPLETED FOR L25
PROCESSING COMPLETED FOR L45
L47          23 DUP REM L46 L25 L45 (0 DUPLICATES REMOVED)
                ANSWERS '1-16' FROM FILE CAPLUS
                ANSWERS '17-21' FROM FILE USPATFULL
                ANSWERS '22-23' FROM FILE DRUGU

=> d ibib abs hitstr 1-21; d iall 22-23

L47  ANSWER 1 OF 23  CAPLUS  COPYRIGHT 2002 ACS
ACCESSION NUMBER:         2002:405736  CAPLUS
DOCUMENT NUMBER:          136:397946
TITLE:                    Neuropeptide Y1 receptor binding compounds in the
                          treatment and diagnosis of cancer
INVENTOR(S):              Reubi, Jean Claude
PATENT ASSIGNEE(S):       Mallinckrodt Inc., USA
SOURCE:                   Eur. Pat. Appl., 20 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.   DATE
     ---------------   ----  --------      ---------------   --------
     EP 1208852         A1   20020529      EP 2000-204183    20001124
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     WO 2002043776      A2   20020606      WO 2001-EP13621   20011121
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA,
            UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
            CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
            BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:                  EP 2000-204183   A  20001124
AB   The present invention relates to the use of compds. that bind the
     neuropeptide Y1 (NPY1) receptor for the prepn. of a pharmaceutical compn.
     for the diagnosis or treatment of tumors expressing NPY1 receptors, in
     particular breast cancer, ovarian cancer and glioblastoma. The invention
     also relates to the pharmaceutical compns. that contain such compds.
     Examples are provided demonstrating the presence and d. of Y1 and Y2
     receptors in human breast tissue and breast carcinoma using 125I-labeled
     PYY and [Leu31,Pro34]-PYY.
IT   163238-19-5D, SR 120819A, compds. with radionuclides or
     paramagnetic metals
```

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Jun 2002
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Jun 2002

>>> USPAT2 is now available. USPATFULL contains full text of the <<<
>>> original, i.e., the earliest published granted patents or <<<
>>> applications. USPAT2 contains full text of the latest US <<<
>>> publications, starting in 2001, for the inventions covered in <<<
>>> USPATFULL. A USPATFULL record contains not only the original <<<
>>> published document but also a list of any subsequent <<<
>>> publications. The publication number, patent kind code, and <<<
>>> publication date for all the US publications for an invention <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc. <<<

>>> USPATFULL and USPAT2 can be accessed and searched together <<<
>>> through the new cluster USPATALL. Type FILE USPATALL to <<<
>>> enter this cluster. <<<
>>> <<<
>>> Use USPATALL when searching terms such as patent assignees, <<<
>>> classifications, or claims, that may potentially change from <<<
>>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate
substance identification.

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L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L17          362 SEA FILE=REGISTRY ABB=ON  L3 AND USPATFULL/LC
L18           27 SEA FILE=USPATFULL ABB=ON  L17
L19         3970 SEA FILE=USPATFULL ABB=ON  UROKINASE#
L20         1650 SEA FILE=USPATFULL ABB=ON  PEMPHIGUS
L21        19101 SEA FILE=USPATFULL ABB=ON  CARCINOMA#
L22        18555 SEA FILE=USPATFULL ABB=ON  METASTA?
L23        15959 SEA FILE=USPATFULL ABB=ON  (TUMOR# OR TUMOUR# OR CANCER? OR
                 NEOPLAS?)(5A)(BREAST OR MAMMAR? OR PANCREA?)
L24          215 SEA FILE=USPATFULL ABB=ON  RENOKINASE# OR ABBOKINASE# OR
                 (RENAL OR KIDNEY OR URINARY)(W)PLASMINOGEN ACTIVATOR#
L25            5 SEA FILE=USPATFULL ABB=ON  L18 AND (L19 OR L20 OR L21 OR L22
                 OR L23 OR L24)
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FILE 'DRUGU' ENTERED AT 10:44:34 ON 14 AUG 2002
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FILE LAST UPDATED: 08 AUG 2002 <20020808/UP>
>>> DERWENT DRUG FILE (SUBSCRIBER) <<<

>>> SDI'S MAY BE RUN WEEKLY OR MONTHLY AS OF JUNE 2001. <<<
>>> (WEEKLY IS THE DEFAULT). FOR PRICING INFORMATION <<<
>>> SEE HELP COST <<<

>>> FILE COVERS 1983 TO DATE <<<
>>> THESAURUS AVAILABLE IN /CT <<<

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L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L44            2 SEA FILE=REGISTRY ABB=ON  L3 AND DRUGU/LC
L45            2 SEA FILE=DRUGU ABB=ON  L44
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=> fil capl; d que nos l10; d que nos l16; s l10 or l16
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FILE COVERS 1907 - 14 Aug 2002  VOL 137 ISS 7
FILE LAST UPDATED: 13 Aug 2002  (20020813/ED)
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This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

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L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L4           208 SEA FILE=CAPLUS ABB=ON  L3
L7             1 SEA FILE=REGISTRY ABB=ON  9039-53-6
L8          7200 SEA FILE=CAPLUS ABB=ON  L7 OR UROKINASE#/OBI
L10           13 SEA FILE=CAPLUS ABB=ON  L4 AND L8


L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L4           208 SEA FILE=CAPLUS ABB=ON  L3
L12          420 SEA FILE=CAPLUS ABB=ON  PEMPHIGUS VULGARIS
L13        66025 SEA FILE=CAPLUS ABB=ON  CARCINOMA#/OBI
L14        45774 SEA FILE=CAPLUS ABB=ON  METASTA?/OBI
L15        41155 SEA FILE=CAPLUS ABB=ON  (TUMOR# OR TUMOUR# OR CANCER? OR
                 NEOPLAS?)(L)(BREAST OR MAMMAR? OR PANCREA?)/OBI
L16            5 SEA FILE=CAPLUS ABB=ON  L4 AND (L12 OR L13 OR L14 OR L15)


L46           16 L10 OR L16

=> fil uspatf; d que nos l25; fil drugu; d que nos l45
FILE 'USPATFULL' ENTERED AT 10:44:34 ON 14 AUG 2002
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 13 Aug 2002 (20020813/PD)
FILE LAST UPDATED: 13 Aug 2002 (20020813/ED)
HIGHEST GRANTED PATENT NUMBER: US6434748
HIGHEST APPLICATION PUBLICATION NUMBER: US2002108159
CA INDEXING IS CURRENT THROUGH 13 Aug 2002 (20020813/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 13 Aug 2002 (20020813/PD)
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=> fil reg; d stat que l3
FILE 'REGISTRY' ENTERED AT 10:43:57 ON 14 AUG 2002
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STRUCTURE FILE UPDATES:   12 AUG 2002  HIGHEST RN 443729-39-3
DICTIONARY FILE UPDATES:  12 AUG 2002  HIGHEST RN 443729-39-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Calculated physical property data is now available.  See HELP PROPERTIES
for more information.  See STNote 27, Searching Properties in the CAS
Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf


L1              STR
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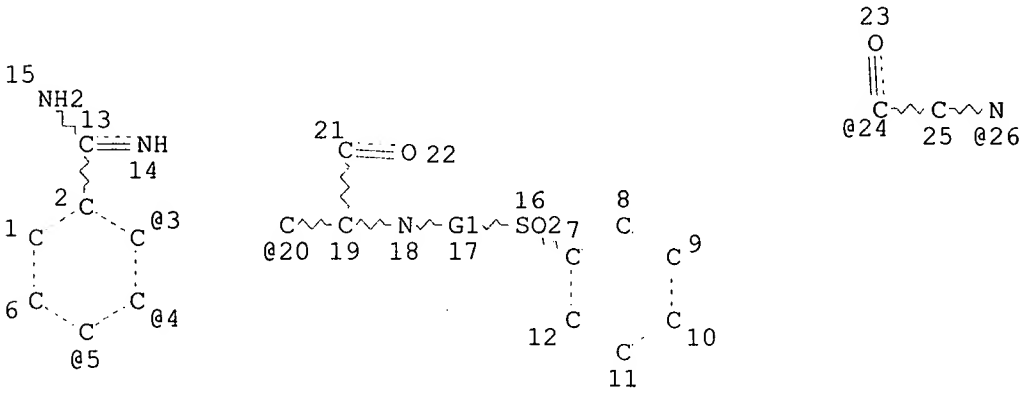


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REP G1=(0-1) 24-18 26-16
VPA 20-3/4/5 U
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  26

STEREO ATTRIBUTES: NONE
L3          1056 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED   2121 ITERATIONS                    1056 ANSWERS
SEARCH TIME: 00.00.02
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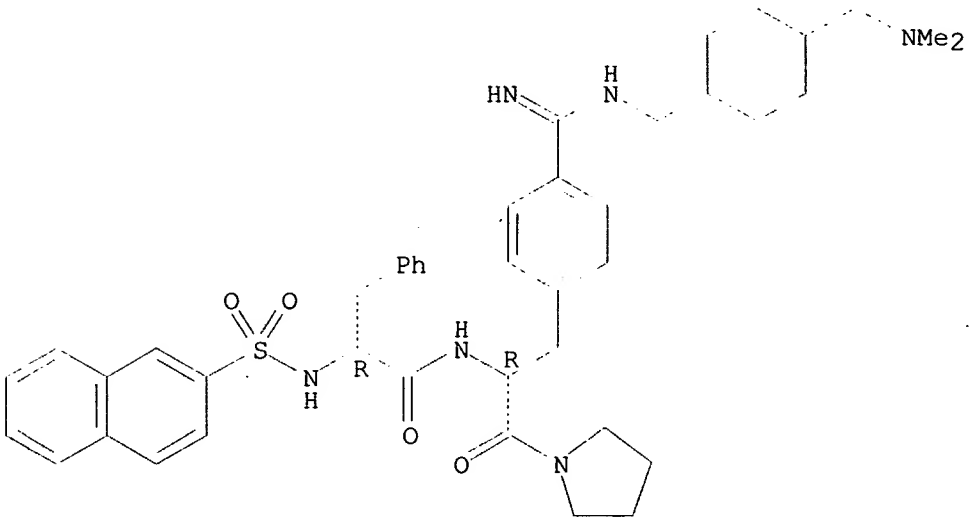
RL: DGN (Diagnostic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(neuropeptide Y1 receptor binding compds. in treatment and diagnosis of cancer)

RN 163238-19-5 CAPLUS

CN Benzenepropanamide, N-[(1R)-1-[[4-[[[[cis-4-[(dimethylamino)methyl]cyclohexyl]methyl]amino]iminomethyl]phenyl]methyl]-2-oxo-2-(1-pyrrolidinyl)ethyl]-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 2 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:798083 CAPLUS
DOCUMENT NUMBER: 135:362557
TITLE: Flavopiridol drug combinations and methods with reduced side effects
INVENTOR(S): Ratain, Mark J.; Innocenti, Federico; Iyer, Lalitha
PATENT ASSIGNEE(S): Arch Development Corporation, USA
SOURCE: PCT Int. Appl., 145 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001080896	A2	20011101	WO 2001-US12526	20010412
WO 2001080896	A3	20020711		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2000-553829 A1 20000421

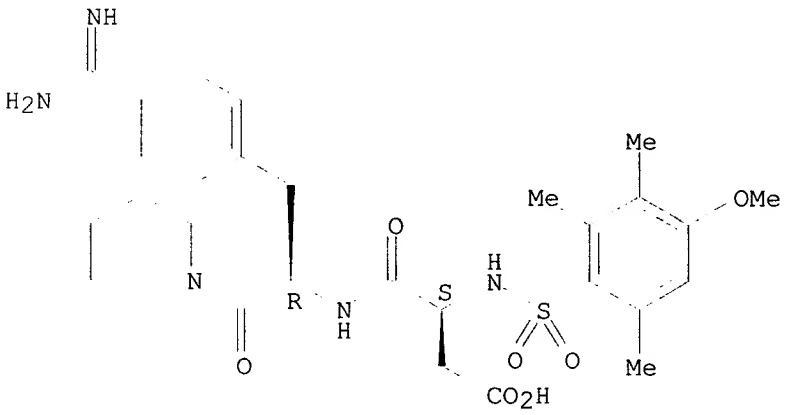
AB This invention provides methods, formulations and kits to reduce the toxicity of flavopiridol and analogs thereof. Disclosed are therapeutics and treatment methods employing such drugs in combination with agents that increase conjugative enzyme activity or glucuronosyltransferase activity, and agents that decrease biliary transport protein activity, such as cyclosporin A, the resultant effects of which are to decrease the significant side effects previously assocd. with treatment using these drugs. The invention also characterizes specific isoforms of glucuronyltransferase enzymes involved in glucuronidation of flavopiridols and their analogs.

IT **146663-95-8**, Crc220
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(flavopiridol drug combinations and methods with reduced side effects)

RN 146663-95-8 CAPLUS

CN Butanoic acid, 4-[[(1R)-1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]amino]-3-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-4-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L47 ANSWER 3 OF 23 CAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:210111 CAPLUS
DOCUMENT NUMBER: 132:222873
TITLE: Preparation of 3-amidinophenylalanine peptides for use as **urokinase** inhibitors
INVENTOR(S): Wikstrom, Peter; Vieweg, Helmut
PATENT ASSIGNEE(S): Pentapharm A.-G., Switz.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000017158	A1	20000330	WO 1998-CH402	19980918

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES,

FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

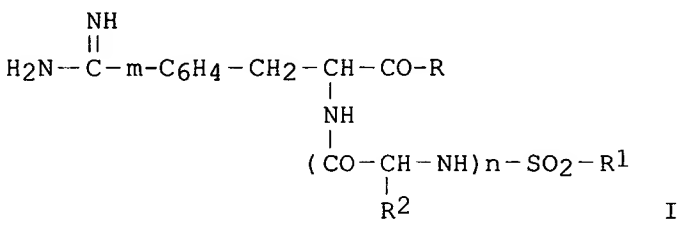
AU 9890597	A1	20000410	AU 1998-90597	19980918
EP 1114024	A1	20010711	EP 1998-942443	19980918

R: DE, ES, FR, GB, IT

PRIORITY APPLN. INFO.: WO 1998-CH402 A 19980918

OTHER SOURCE(S): MARPAT 132:222873

GI



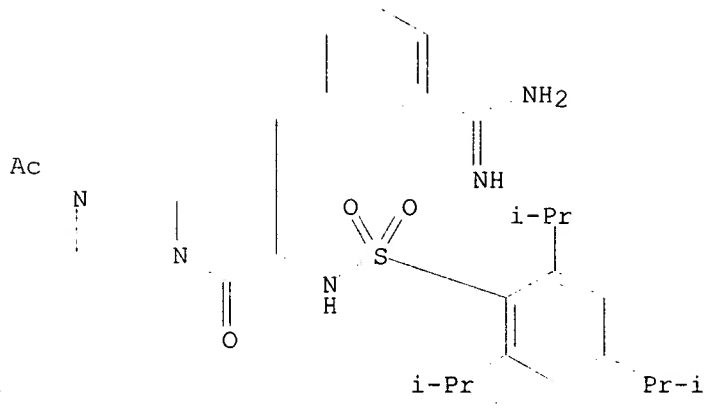
I

AB Title compds. [(I); R = OH, O-(cyclo)alkyl, O-arylalkyl, PhCH2, Ph(CH2)2, substituted pyrrolidine, piperidine, piperazine, NR3R4; R3, R4 = (independently) H, (un)branched alkyl, (un)substituted aralkyl, PhCH2, Ph(CH2)2, cycloalkyl-alkyl; R3 = H, R4 = NHR5; R5 = (hetero)aryl; R1 = (un)branched alkyl, (un)substituted (hetero)aryl; R2 = H, (un)branched alkyl; n = 0-1] as L-,D-, or DL forms, were prepd. for use as urokinase inhibitors for the treatment of tumors or in diagnosis. Thus, (L)-3-cyanophenylalanine Me ester hydrochloride was N-protected with 2,4,6-triisopropylphenylsulfonyl chloride, deesterified, condensed with 1-ethoxycarbonyl-piperazine, and the cyano group converted to the amidine (via conversion to thioamide and reaction with MeI to give thioimide Me ester, which was then reacted with ammonium acetate), to give I [R = 4-ethoxycarbonyl-piperazine; R1 = 2,4,6-triisopropylphenyl; n = 0 (II)]. In in vivo tests of urokinase inhibition, II had Ki 0.49 .mu.mol/l.

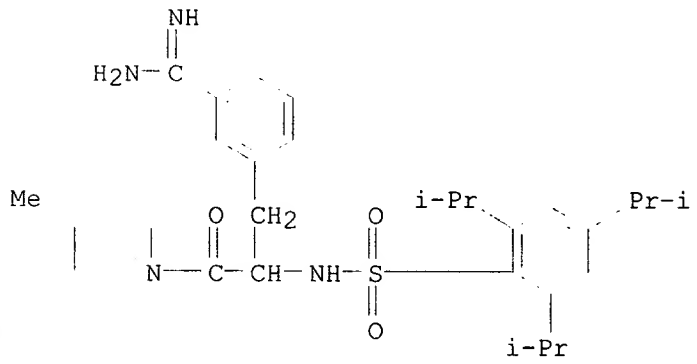
IT **161357-71-7P 169388-44-7P 220355-61-3P**
220355-63-5P 220355-64-6P 222842-26-4P
255374-84-6P 255374-89-1P 255374-90-4P
256430-86-1P 256430-96-3P 261158-90-1P
261158-91-2P 261158-92-3P 261158-93-4P
261158-94-5P 261158-95-6P 261158-96-7P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of amidinophenylalanine peptides for use as **urokinase** inhibitors)

RN 161357-71-7 CAPLUS

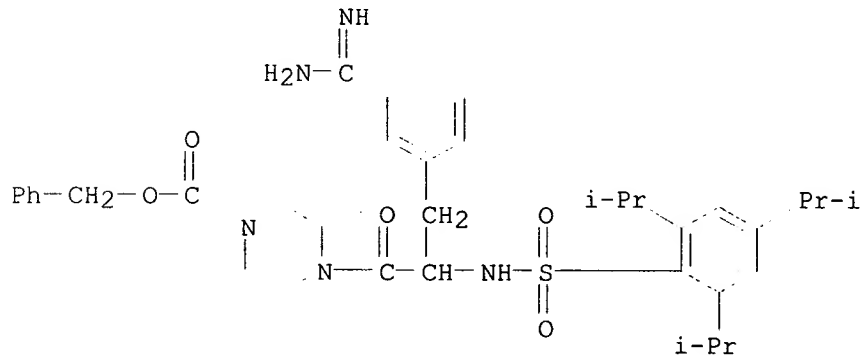
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 169388-44-7 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-methyl- (9CI) (CA INDEX NAME)

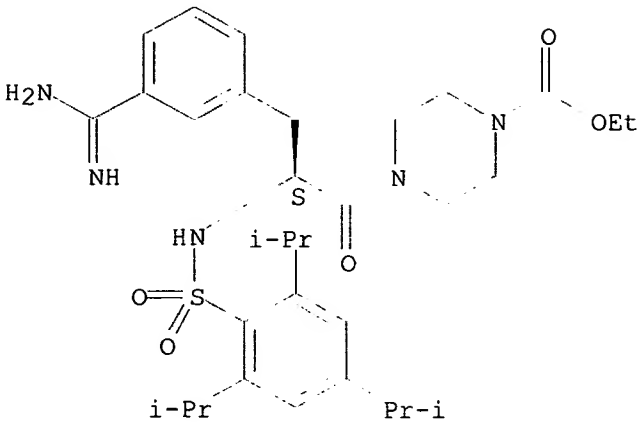


RN 220355-61-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

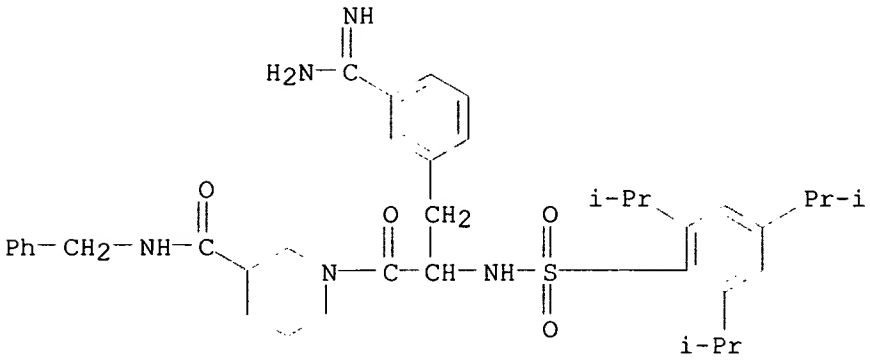


RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

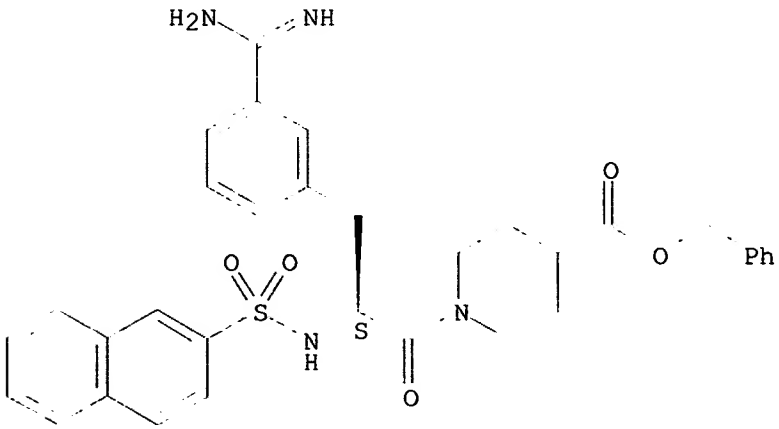


RN 220355-64-6 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



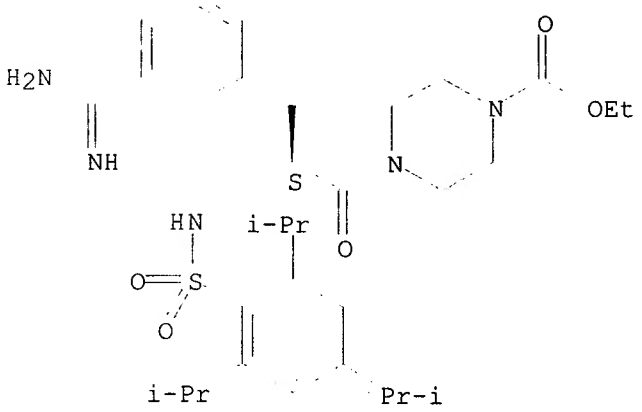
RN 222842-26-4 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



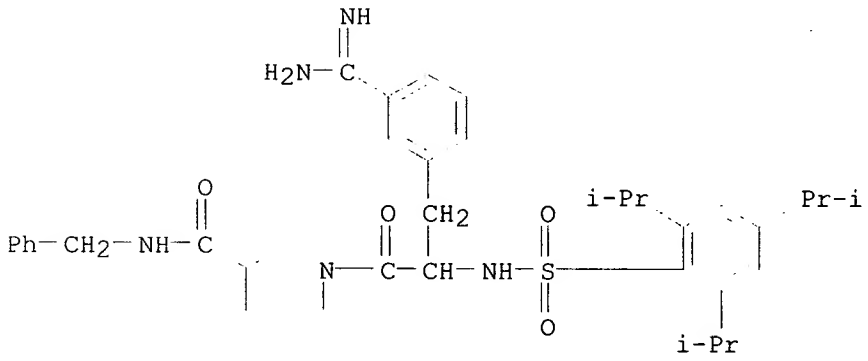
RN 255374-84-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.



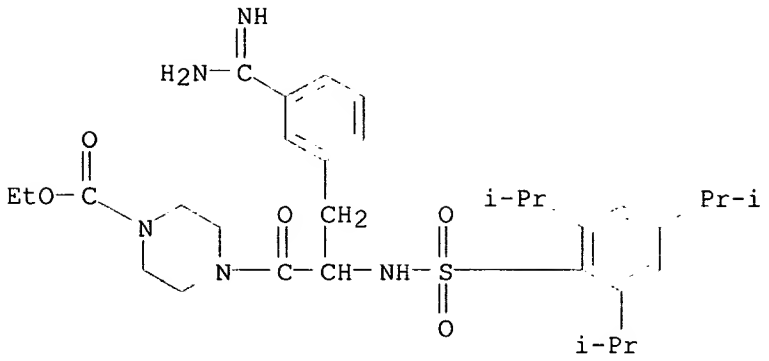
● HCl

RN 255374-89-1 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

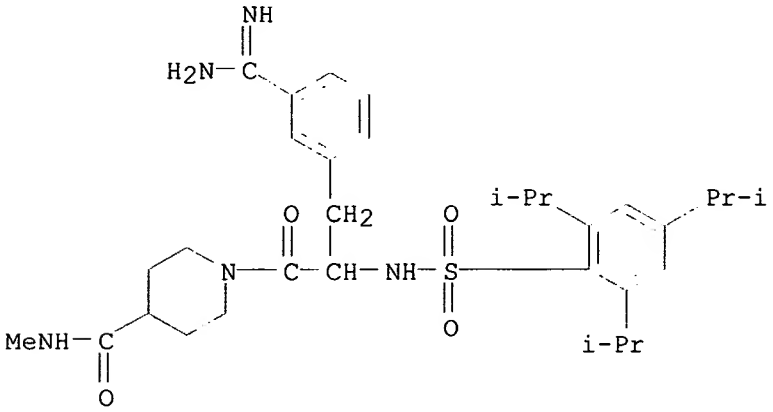


● HCl

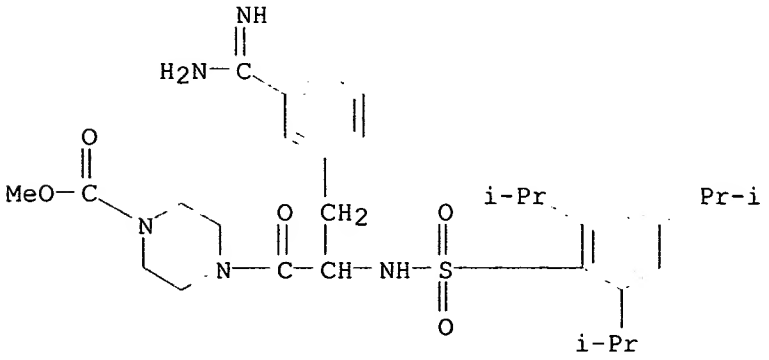
RN 255374-90-4 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 256430-86-1 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-methyl- (9CI) (CA INDEX NAME)

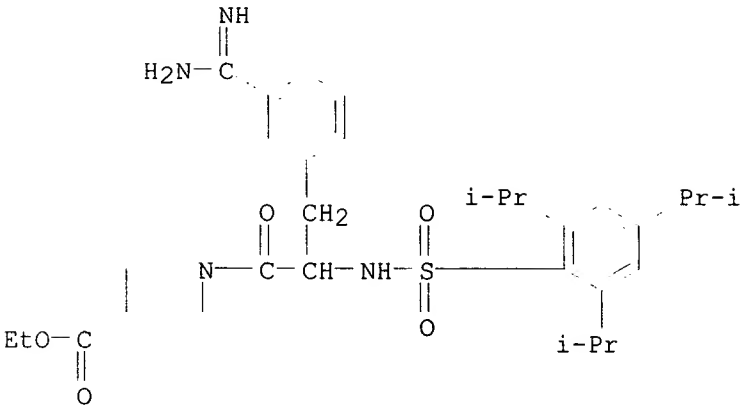


RN 256430-96-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)

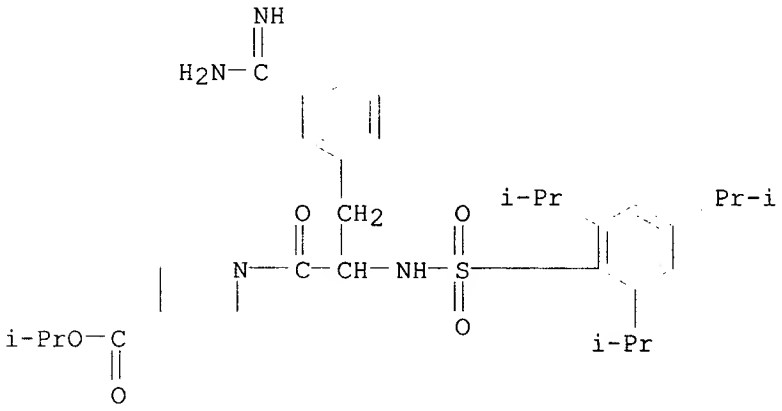


RN 261158-90-1 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester

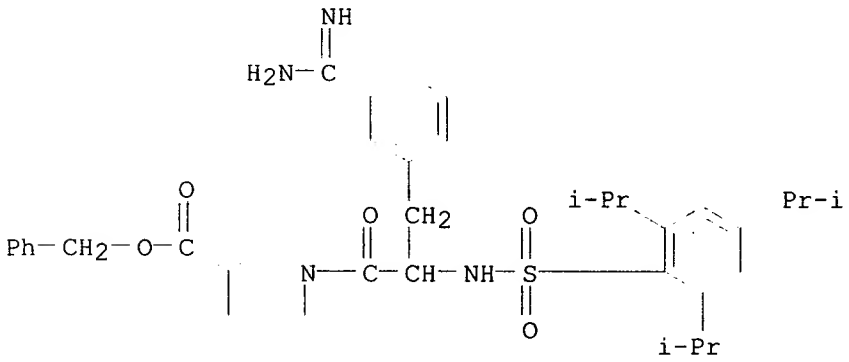
(9CI) (CA INDEX NAME)



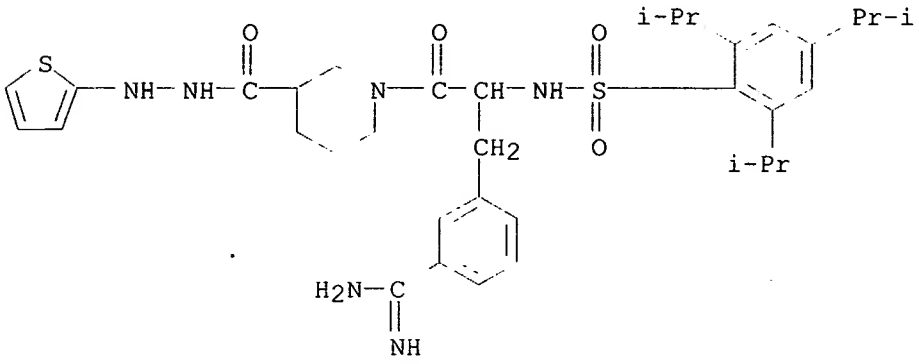
RN 261158-91-2 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



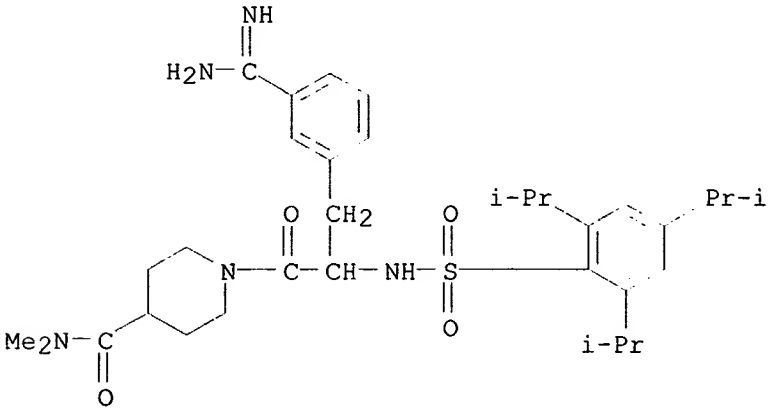
RN 261158-92-3 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 261158-93-4 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 2-(2-thienyl)hydrazide (9CI) (CA INDEX NAME)

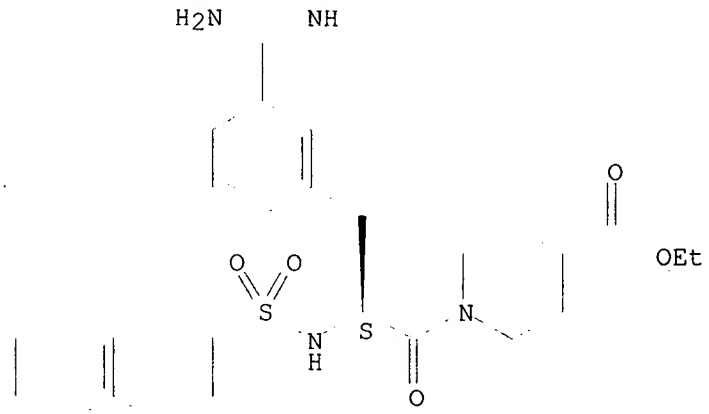


RN 261158-94-5 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

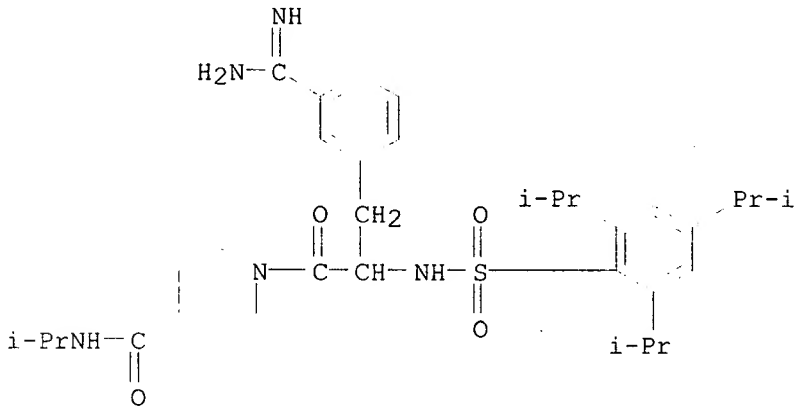


RN 261158-95-6 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 261158-96-7 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 4 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:84664 CAPLUS
DOCUMENT NUMBER: 132:108297
TITLE: Preparation and use of **urokinase** inhibitors in the treatment of malignant tumors
INVENTOR(S): Wilhelm, Olaf; Magdolen, Viktor; Sturzebecher, Jorg; Foekens, John; Lutz, Verena
PATENT ASSIGNEE(S): Wilex Biotechnology Gmbh, Germany
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

applicant=

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004954	A2	20000203	WO 1999-EP5145	19990720
WO 2000004954	A3	20000622		

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 9951615	A1	20000214	AU 1999-51615	19990720	
BR 9912327	A	20010502	BR 1999-12327	19990720	
EP 1098651	A2	20010516	EP 1999-936570	19990720	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI					
JP 2002521348	T2	20020716	JP 2000-560945	19990720	
PRIORITY APPLN. INFO.:			EP 1998-113519	A 19980720	
			WO 1999-EP5145	W 19990720	

OTHER SOURCE(S): MARPAT 132:108297

AB The invention relates to the use of derivs. of 3-amidino-phenyl-alanine [H2NC(:NH)-3-C6H4-CH2CH(NH(COCH(R2)NH)nSO2R1)COR; R = OH, (substituted) ester, (substituted) amine, (substituted) heterocycle; R1 = substituted phenyl; R2 = H, (un)branched alkyl; n=0,1 (I)] as urokinase inhibitors for treating malignant tumors and the formation of metastases thereof. Thus, beginning with (L)-3-cyanophenylalanine Me ester and 2,4,6-tri(isopropyl)benzenesulfonyl chloride, (S)-I [n=0; R = 4-ethoxycarbonyl-piperazinyl; R1 = 2,4,6-tri(isopropyl)-C6H2; (II)] was synthesized in four steps. In in vitro inhibition tests of urokinase, II had Ki 0.41 .mu.M/l; the compd. prepd. from (DL)-phenylalanine starting material had Ki 0.96 .mu.M/l.

IT **9039-53-6**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of by amidinophenylalanine derivs. for use in the treatment of malignant tumors)

RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

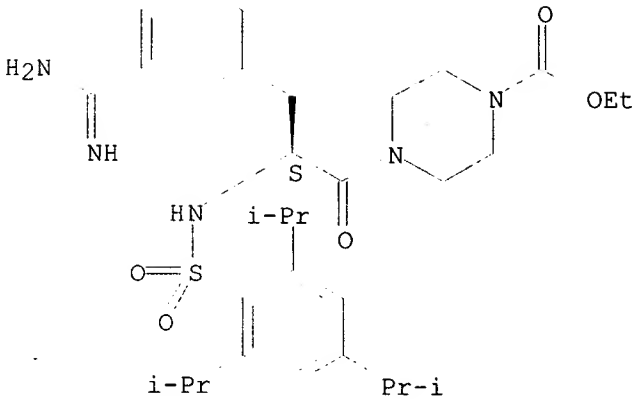
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **255374-84-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and reaction of in the synthesis of amidinophenylalanine derivs. for use as **urokinase** inhibitors)

RN 255374-84-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

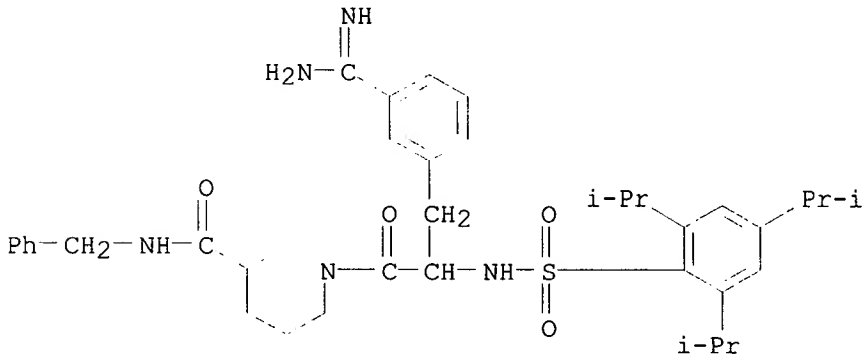
544/388
514/255.01



● HCl

IT **255374-89-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of for use as **urokinase** inhibitors)
RN 255374-89-1 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

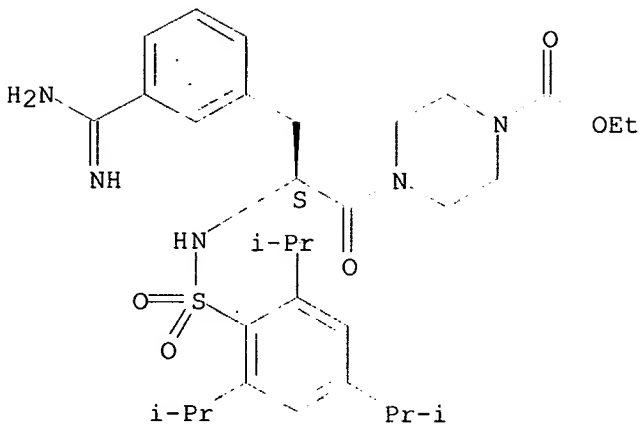
546/226
514/330



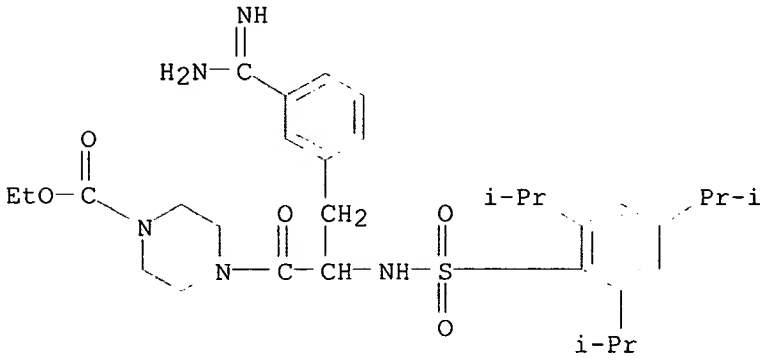
● HCl

IT **220355-63-5 255374-90-4**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of for use as **urokinase** inhibitors)
RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 255374-90-4 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)



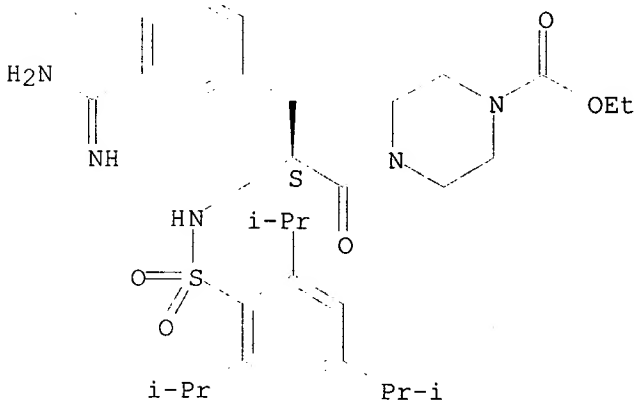
L47 ANSWER 5 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:534024 CAPLUS
DOCUMENT NUMBER: 133:276293
TITLE: Crystals of the **Urokinase** Type Plasminogen Activator Variant .beta.c-uPA in Complex with Small Molecule Inhibitors Open the Way towards Structure-based Drug Design
AUTHOR(S): Zeslawska, Ewa; Schweinitz, Andrea; Karcher, Annette; Sondermann, Peter; Sperl, Stefan; Sturzebecher, Jorg; Jacob, Uwe
CORPORATE SOURCE: Abteilung Strukturforschung, Max-Planck-Institut fur Biochemie, Martinsried, D-82152, Germany
SOURCE: Journal of Molecular Biology (2000), 301(2), 465-475
CODEN: JMOBAK; ISSN: 0022-2836
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Urokinase is a serine protease involved in cancer growth and metastasis. Here the authors present the first urokinase crystal structure in complex with reversible inhibitors at 2.1 and 2.6 .ANG. resoln. These inhibitor complex structures have been obtained from crystals of engineered urokinase type plasminogen activator designed to obtain a crystal form open for inhibitor soaking. The mutant C122S loses its flexible A-chain

upon activation cleavage and crystallizes in the presence of benzamidine, which was later displaced by the desired inhibitor. This new soakable crystal form turned out to be of great value in the process of structure-based drug design. The evaluated binding mode of amiloride, and UKI-1D revealed a new subsite of the primary specificity pocket of urokinase that will be employed in the future ligand optimization process. (c) 2000 Academic Press.

IT **220355-63-5**, UKI 1 **300579-37-7**, UKI 1D
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(crystals of **urokinase** type plasminogen activator variant .beta.c-uPA in complex with small mol. inhibitors open way towards structure-based drug design)

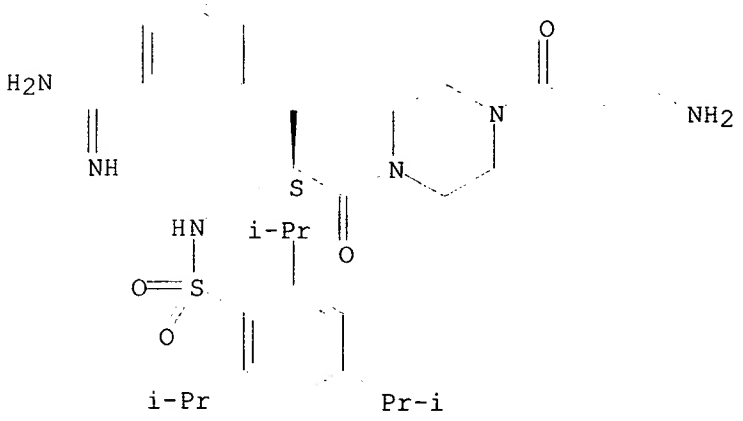
RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 300579-37-7 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-(3-amino-1-oxopropyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

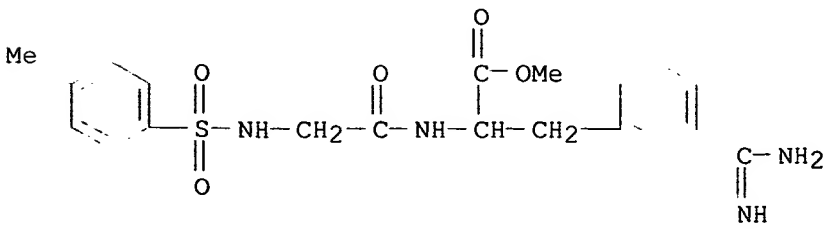


IT **9039-53-6, Urokinase 139639-24-0,**

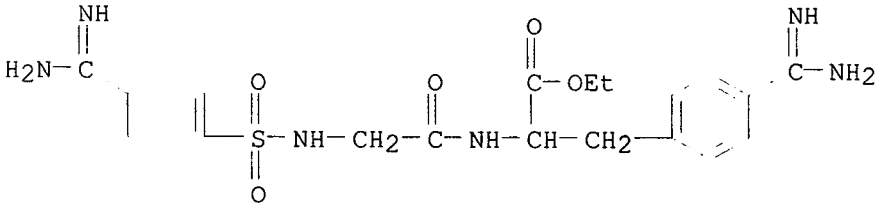
Urokinase type plasminogen activator
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(crystals of **urokinase** type plasminogen activator variant .beta.c-uPA in complex with small mol. inhibitors open way towards structure-based drug design)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 139639-24-0 CAPLUS
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 6 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:422259 CAPLUS
DOCUMENT NUMBER: 133:219271
TITLE: Urethanyl-3-amidinophenylalanine derivatives as inhibitors of factor Xa. X-ray crystal structure of a trypsin/inhibitor complex and modeling studies
AUTHOR(S): Sperl, Stefan; Bergner, Andreas; Sturzebecher, Jorg; Magdolen, Viktor; Bode, Wolfram; Moroder, Luis
CORPORATE SOURCE: Max-Planck-Institut fur Biochemie, Martinsried, D-82152, Germany
SOURCE: Biological Chemistry (2000), 381(4), 321-329
CODEN: BICHF3; ISSN: 1431-6730
PUBLISHER: Walter de Gruyter GmbH & Co. KG
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Hydrophobic urethanyl derivs. of 3-amidinophenylalanine Me ester were found to be relatively potent and selective factor Xa inhibitors. These compds. consist of the arginine-mimetic 3-benzamidino group as P1 residue and of hydrophobic residues as potential interaction partners for the S3/S4 aryl binding site of the enzyme. Attempts to possibly identify their binding mode to factor Xa via the X-ray crystal structure of a trypsin/inhibitor complex and analogy modeling on the crystal structure of factor Xa failed. However, synthesis of enantiomerically pure (R)- and (S)-derivs., combined with modeling expts., led to an hypothetical non-substrate like binding mode, which was fully confirmed by the remarkably enhanced inhibitory potency of derivs. in which the Me ester was replaced by arylamides for interactions with the S3/S4 enzyme binding subsites. With adamantyloxycarbonyl-(R)-3-amidinophenylalanine-phenethylamide a nanomolar inhibition was obtained, thus indicating this new class of factor Xa inhibitors as a highly promising lead structure.
IT **114498-49-6 214842-83-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(prepn., enzyme inhibition and mol. modeling studies of urethanyl-3-amidinophenylalanine derivs. as inhibitors of factor Xa)
RN 114498-49-6 CAPLUS
CN Phenylalanine, N-[(4-methylphenyl)sulfonyl]glycyl-3-(aminoiminomethyl)-, methyl ester (9CI) (CA INDEX NAME)



RN 214842-83-8 CAPLUS
CN Phenylalanine, N-[[4-(aminoiminomethyl)phenyl]sulfonyl]glycyl-4-(aminoiminomethyl)-, ethyl ester (9CI) (CA INDEX NAME)



IT **139639-24-0, Urokinase** plasminogen activator
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn., enzyme inhibition and mol. modeling studies of urethanyl-3-amidinophenylalanine derivs. as inhibitors of factor Xa)
RN 139639-24-0 CAPLUS
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 7 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:113706 CAPLUS
DOCUMENT NUMBER: 130:168661
TITLE: Preparation of N-sulfonyl phenylalanine dipeptide derivatives and analogs as inhibitors of leukocyte adhesion mediated by VLA-4
INVENTOR(S): Thorsett, Eugene D.; Semko, Christopher M.; Sarantakis, Dimitrios; Pleiss, Michael A.; Lombardo, Louis John; Kreft, Anthony; Konradi, Andrei W.; Grant, Francine S.; Dressen, Darren B.; Dappen, Michael S.; Baudy, Reinhardt Bernhard; Ashwell, Susan
PATENT ASSIGNEE(S): Athena Neurosciences, Inc., USA; American Home Products Corporation
SOURCE: PCT Int. Appl., 254 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9906431	A1	19990211	WO 1998-US15313	19980730
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9886611	A1	19990222	AU 1998-86611	19980730
ZA 9806827	A	20000502	ZA 1998-6827	19980730
EP 1001972	A1	20000524	EP 1998-937990	19980730
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9812114	A	20000718	BR 1998-12114	19980730
JP 2001512134	T2	20010821	JP 2000-505186	19980730
NO 2000000450	A	20000328	NO 2000-450	20000128

PRIORITY APPLN. INFO.: US 1997-920394 A1 19970731
WO 1998-US15313 W 19980730

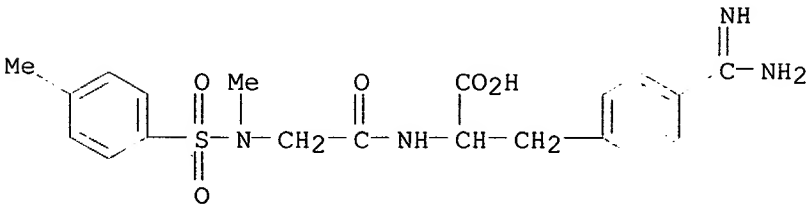
OTHER SOURCE(S): MARPAT 130:168661

AB Disclosed are title compds. R1SO2NR2CHR3QCHR5COR6 [R1 = (un)substituted alkyl, (un)substituted aryl, (un)substituted cycloalkyl, (un)substituted heterocyclyl; R2 = H, any group R1; R1R2 may form (un)substituted heterocyclic ring; R3 = H, any group R1; R2R3 may form (un)substituted heterocyclic ring; R5 = (CH2)x-Ar-R5'; R5' = substituted alkylcarbonylamino, alkoxyaryl, aryl, heteroaryl, NR2, alkoxy-NR2, alkenyl, alkynyl, aryloxy, heteroaryloxy, tetrazolyl, etc.; each R = H, any group R1; Ar = (un)substituted aryl or heteroaryl; x = 1-4; Q = C(X)NR7; R7 = H, alkyl; X = O, S; R6 = NH2, (un)substituted alkoxy, (un)substituted cycloalkoxy, succinimidyloxy, adamantylamino, .beta.-cholest-5-en-3-yloxy, NHOY, NH(CH2)pCO2Y, OCH2NR9R10; Y = H, (un)substituted alkyl, (un)substituted aryl; p = 1-8; R9 = (un)substituted CO-aryl; R10 = H, CH2CO2R11, NHSO2Z; R11 = alkyl; Z = (un)substituted alkyl, (un)substituted cycloalkyl, (un)substituted aryl, (un)substituted heteroaryl, (un)substituted heterocyclyl; and pharmaceutically acceptable salts thereof, with provisos] which bind VLA-4 (also referred to as integrin .alpha.4.beta.1 and CD49d/CD29). Certain of these compds. also inhibit leukocyte adhesion and, in particular, leukocyte adhesion mediated by VLA-4. Such compds. are useful in the treatment of inflammatory diseases in a mammalian patient, e.g., human, wherein the disease may be, for example, asthma, Alzheimer's disease, atherosclerosis, AIDS dementia, diabetes, inflammatory bowel disease, rheumatoid arthritis, tissue transplantation, tumor metastasis and myocardial ischemia. The compds. can also be administered for the treatment of inflammatory brain diseases such as multiple sclerosis. Thus, BOP-mediated peptide coupling of Ts-Pro-Phe(4-NH2)-OMe (Ts = tosyl) with Boc-Gly-OH, followed by sapon., gave desired title compd. Ts-Pro-Phe(4-Boc-Gly-NH)-OH. All prepd. compds. have IC50 .ltoreq. 15 .mu.M in a VLA-4 binding assay.

IT **220397-54-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of N-sulfonyl phenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220397-54-6 CAPLUS

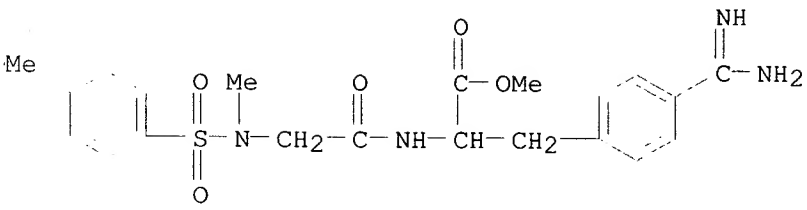
CN Phenylalanine, N-methyl-N-[(4-methylphenyl)sulfonyl]glycyl-4-(aminoiminomethyl)- (9CI) (CA INDEX NAME)



IT **220398-41-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of N-sulfonyl phenylalanine dipeptide derivs. and analogs as inhibitors of leukocyte adhesion mediated by VLA-4)

RN 220398-41-4 CAPLUS

CN Phenylalanine, N-methyl-N-[(4-methylphenyl)sulfonyl]glycyl-4-(aminoiminomethyl)-, methyl ester (9CI) (CA INDEX NAME)

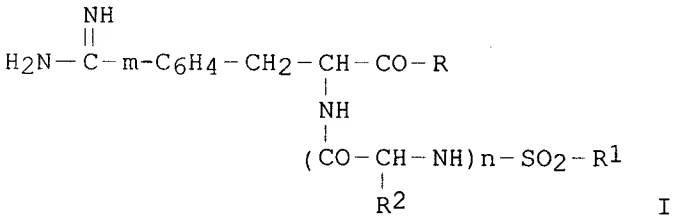


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:230194 CAPLUS
DOCUMENT NUMBER: 132:222869
TITLE: Preparation of 3-amidinophenylalanine peptides for use as **urokinase** inhibitors
INVENTOR(S): Wikstroem, Peter
PATENT ASSIGNEE(S): Pentapharm A.-G., Switz.
SOURCE: Patentschrift (Switz.), 7 pp.
CODEN: SWXXAS
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 689611	A	19990715	CH 1995-581	19950301

OTHER SOURCE(S): MARPAT 132:222869
GI



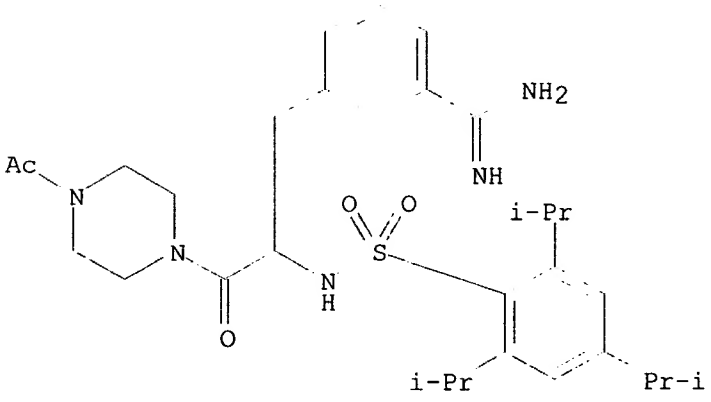
I

AB Title compds. [(I); R = OH, O-(cyclo)alkyl, O-arylalkyl, PhCH2, Ph(CH2)2, substituted pyrrolidine, piperidine, piperazine, NR3R4; R3, R4 = (independently) H, (un)branched alkyl, (un)substituted aralkyl, PhCH2, Ph(CH2)2, cycloalkyl-alkyl; R3 = H, R4 = NHR5; R5 = (hetero)aryl; R1 = (un)branched alkyl, (un)substituted (hetero)aryl; R2 = H, (un)branched alkyl; n = 0-1] as L-,D-, or DL forms, were prepd. for use as urokinase inhibitors for the treatment of tumors or in diagnosis. Thus, (L)-3-cyanophenylalanine Me ester hydrochloride was N-protected with 2,4,6-triisopropylphenylsulfonyl chloride, deesterified, condensed with 1-ethoxycarbonyl-piperazine, and the cyano group converted to the amidine (via conversion to thioamide and reaction with MeI to give thioimide Me ester, which was then reacted with ammonium acetate), to give I [R = 4-ethoxycarbonyl-piperazine; R1 = 2,4,6-triisopropylphenyl; n = 0 (II)]. In in vivo tests of urokinase inhibition, II had Ki 0.49 .mu.mol/l.

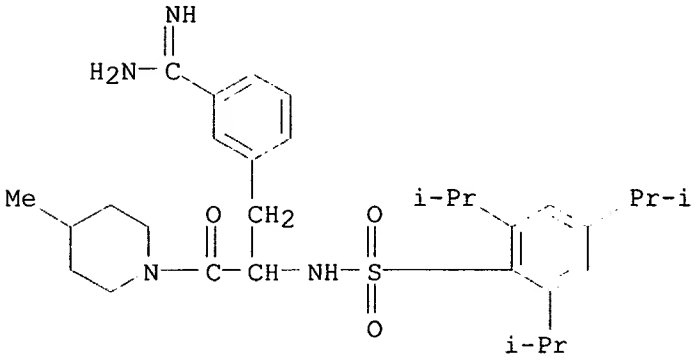
IT **161357-71-7P 169388-44-7P 220355-61-3P**
220355-63-5P 220355-64-6P 222842-26-4P
255374-84-6P 255374-90-4P 256430-86-1P
256430-96-3P 261158-90-1P 261158-91-2P

261158-92-3P 261158-93-4P 261158-95-6P
261158-96-7P 261628-59-5P 261628-61-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 3-amidinophenylalanine peptides for use as **urokinase** inhibitors)

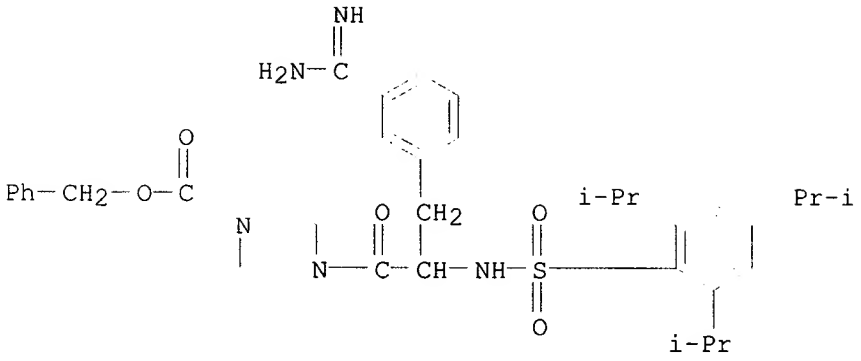
RN 161357-71-7 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 169388-44-7 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-methyl- (9CI) (CA INDEX NAME)

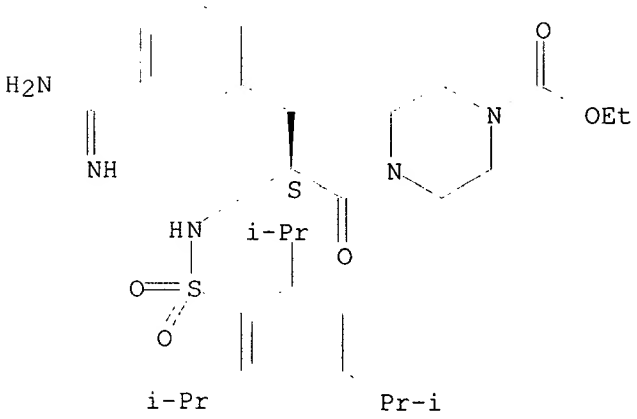


RN 220355-61-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

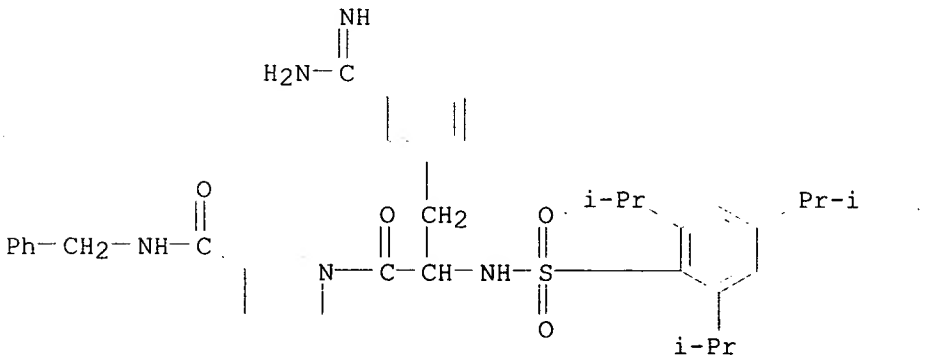


RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



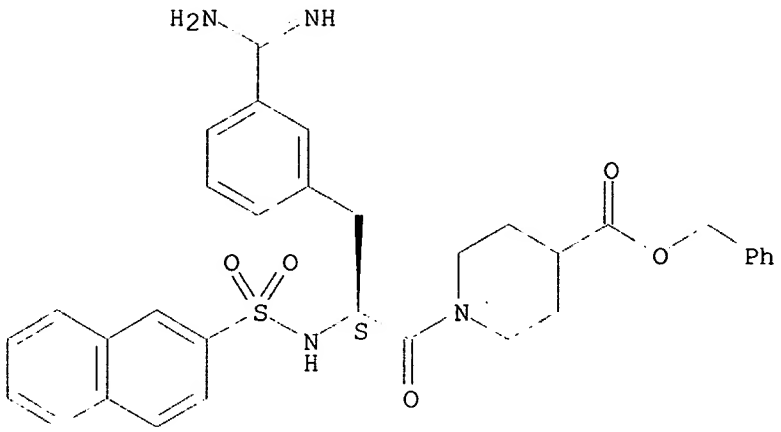
RN 220355-64-6 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 222842-26-4 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-

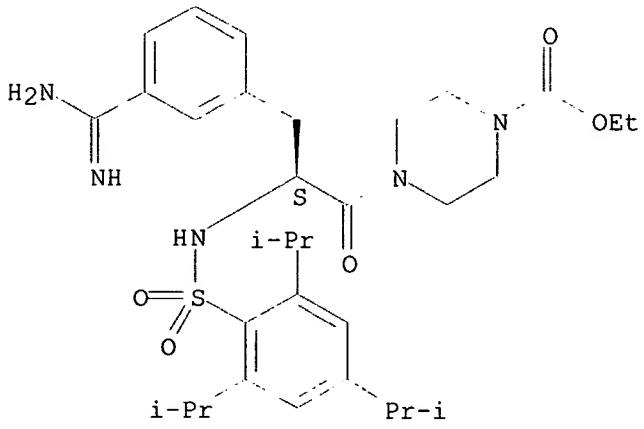
naphthalenylsulfonyl)amino]-1-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



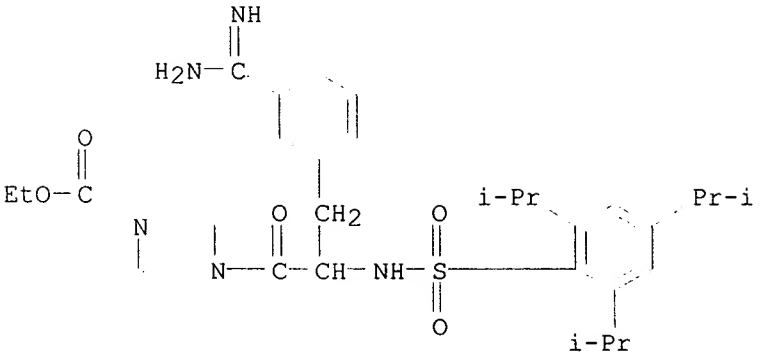
RN 255374-84-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

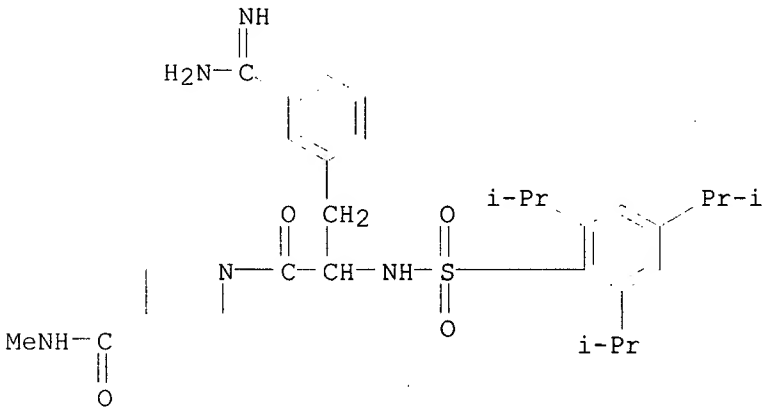


● HCl

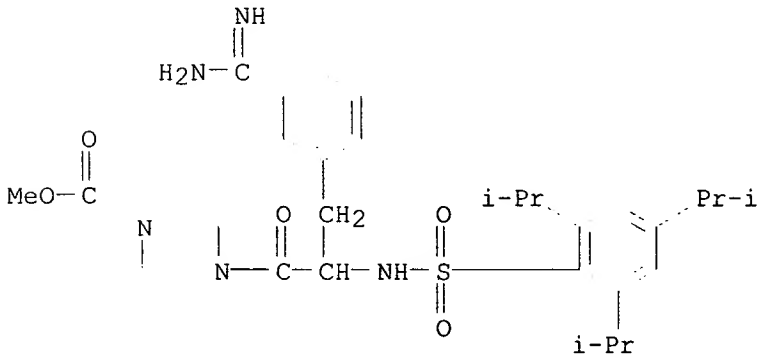
RN 255374-90-4 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 256430-86-1 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-methyl- (9CI) (CA INDEX NAME)

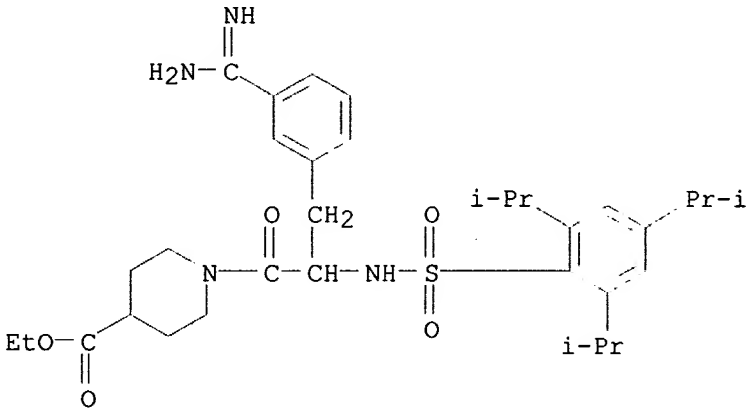


RN 256430-96-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)

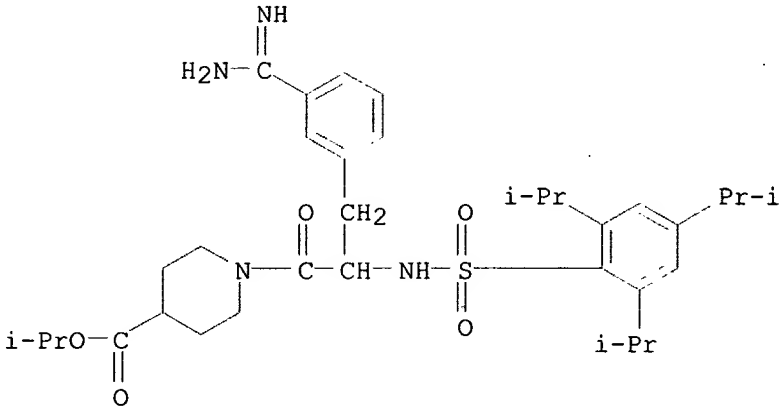


RN 261158-90-1 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester

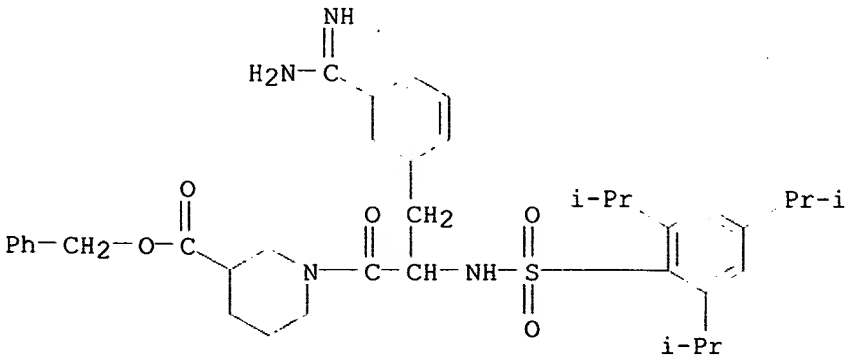
(9CI) (CA INDEX NAME)



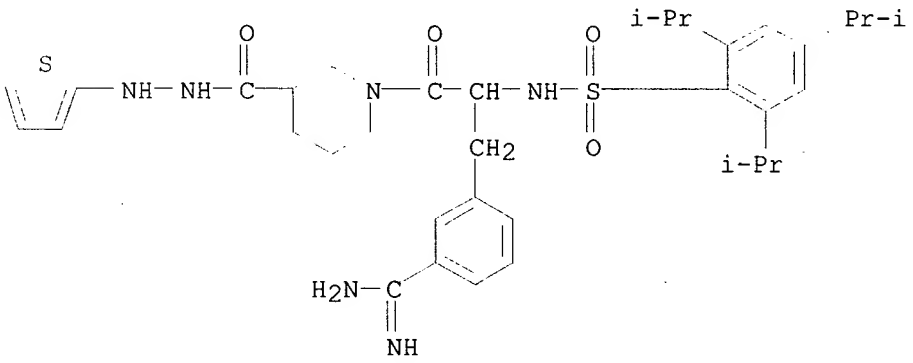
RN 261158-91-2 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 261158-92-3 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

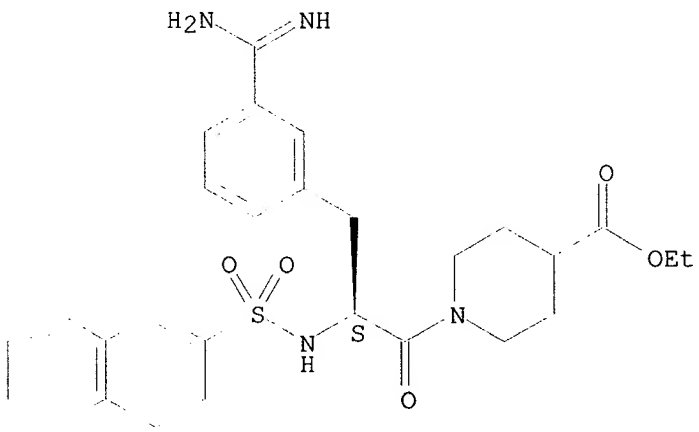


RN 261158-93-4 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 2-(2-thienyl)hydrazide (9CI) (CA INDEX NAME)

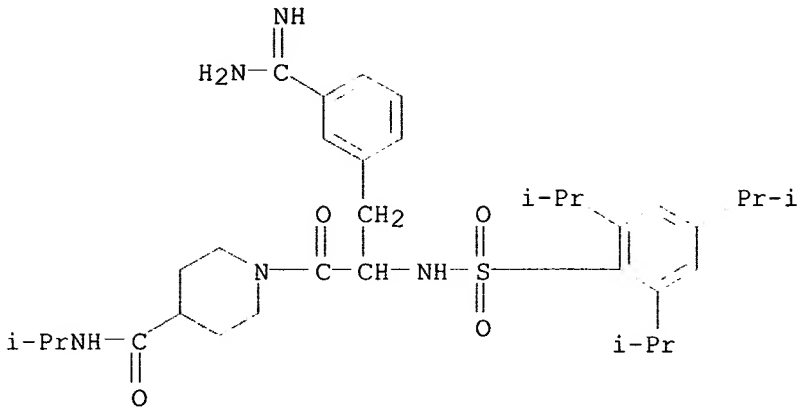


RN 261158-95-6 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

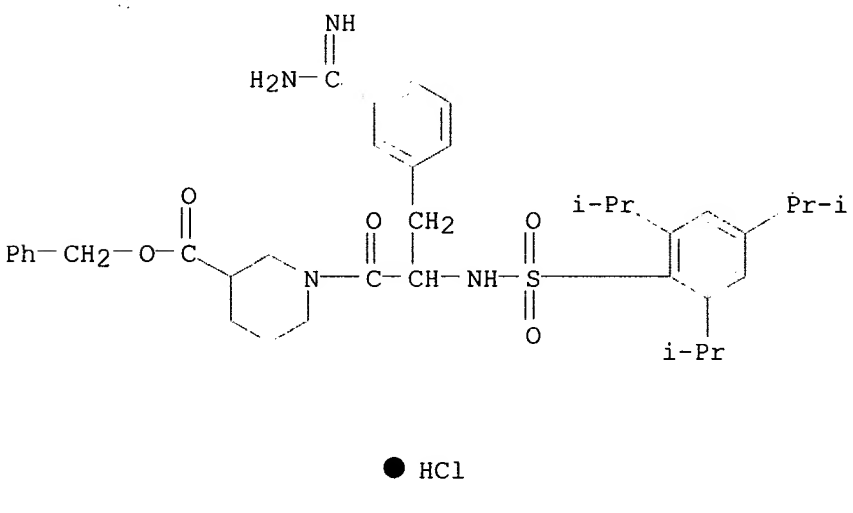
Absolute stereochemistry.



RN 261158-96-7 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)

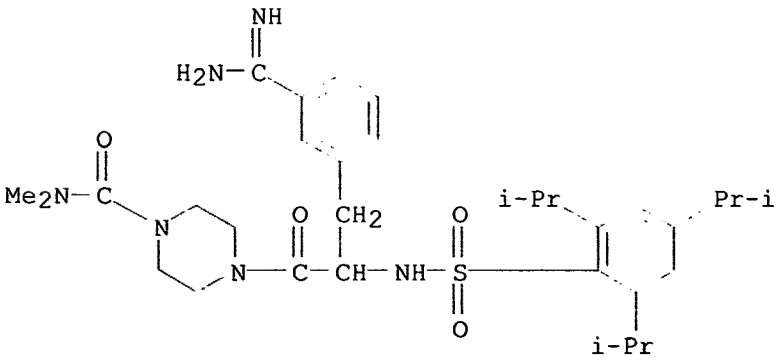


RN 261628-59-5 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

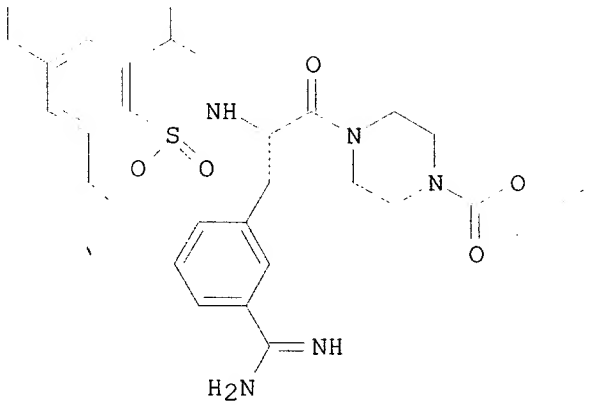


● HCl

RN 261628-61-9 CAPLUS
CN 1-Piperazinecarboxamide, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



L47 ANSWER 9 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1999:737596 CAPLUS
DOCUMENT NUMBER: 132:131771
TITLE: 3-Amidinophenylalanine-based inhibitors of **urokinase**
AUTHOR(S): Sturzebecher, Jorg; Vieweg, Helmut; Steinmetzer, Torsten; Schweinitz, Andrea; Stubbs, Milton T.; Renatus, Martin; Wikstrom, Peter
CORPORATE SOURCE: Zentrum f. Vaskulare Biologie u. Medizin, Universitat Jena, Erfurt, D-99089, Germany
SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(21), 3147-3152
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

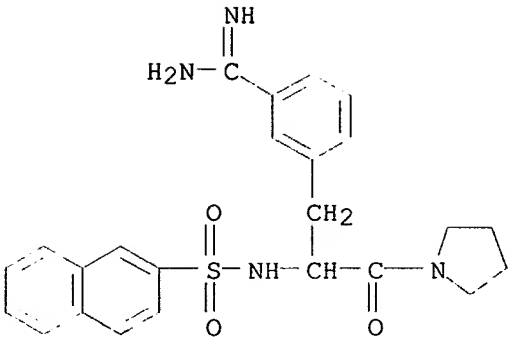


I

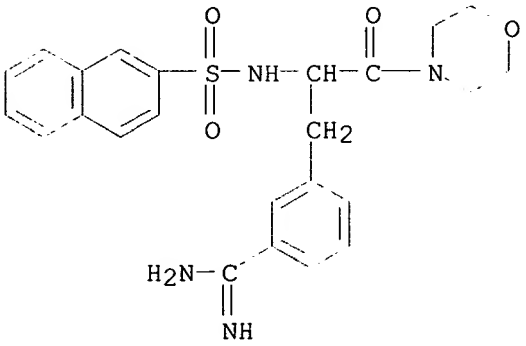
AB Synthesis and anti-uPA activity of a series of N.alpha.-triisopropylphenylsulfonyl-protected 3-amidinophenylalanine amides are described. We have explored SAR around the C-terminal amide part for inhibition of uPA, plasmin and trypsin. Modification of the amide part has been found to affect potency but not selectivity. With a Ki of 0.41 .mu.M I is one of the most potent uPA inhibitors described so far. The X-ray crystal structure of I was solved in complex with trypsin, superimposed with uPA and the results suggest an unique binding mode of this inhibitor type.

IT **80457-08-5P 80457-13-2P 121803-55-2P**
161357-71-7P 169388-30-1P 169388-44-7P
207514-85-0P 255374-90-4P 256430-64-5P
256430-66-7P 256430-70-3P 256430-72-5P
256430-74-7P 256430-76-9P 256430-78-1P
256430-80-5P 256430-84-9P 256430-86-1P
256430-88-3P 256430-90-7P 256430-92-9P
256430-93-0P 256430-94-1P 256430-95-2P
256430-96-3P 256431-01-3P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(amidinophenylalanine-based inhibitors of **urokinase**)

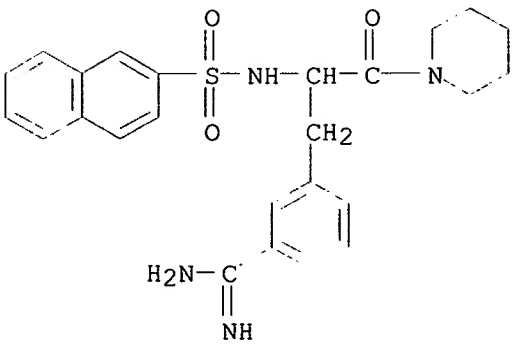
RN 80457-08-5 CAPLUS
CN Pyrrolidine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



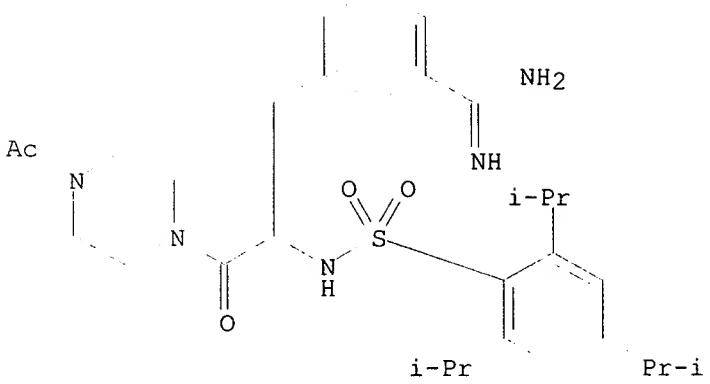
RN 80457-13-2 CAPLUS
CN Morpholine, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



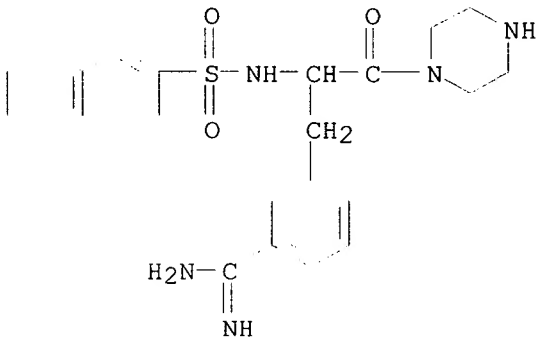
RN 121803-55-2 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



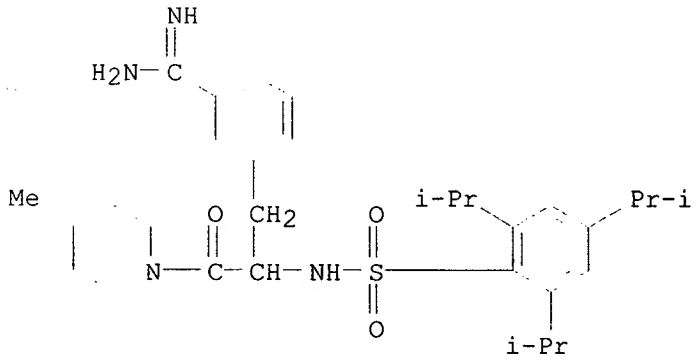
RN 161357-71-7 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



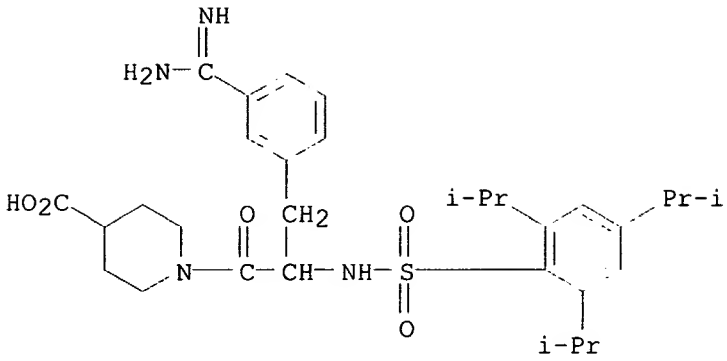
RN 169388-30-1 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



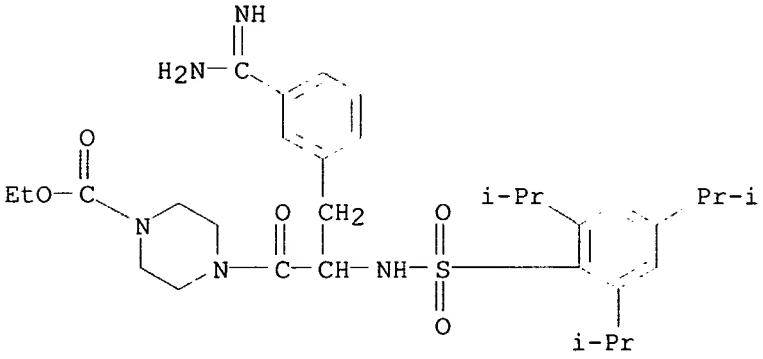
RN 169388-44-7 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-methyl- (9CI) (CA INDEX NAME)



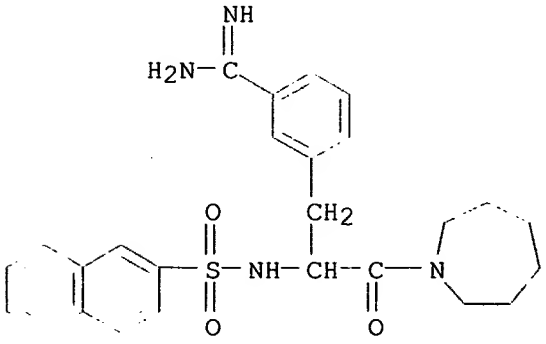
RN 207514-85-0 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



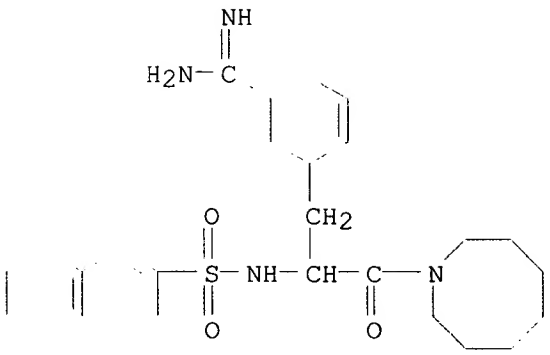
RN 255374-90-4 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)



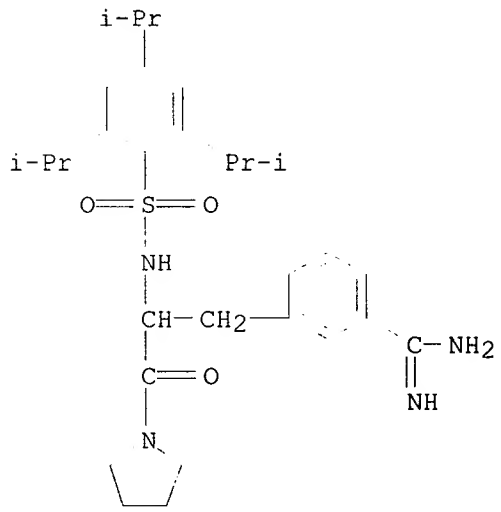
RN 256430-64-5 CAPLUS
CN 1H-Azepine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]hexahydro- (9CI) (CA INDEX NAME)



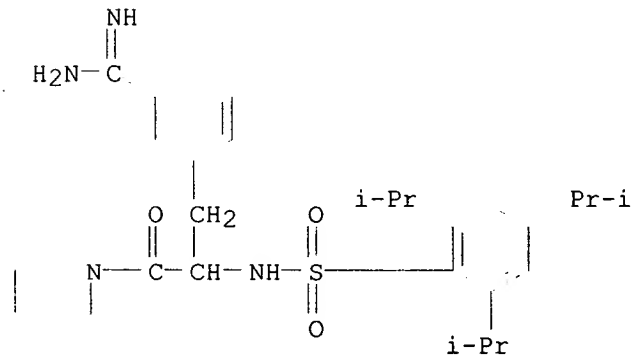
RN 256430-66-7 CAPLUS
CN Azocine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]octahydro- (9CI) (CA INDEX NAME)



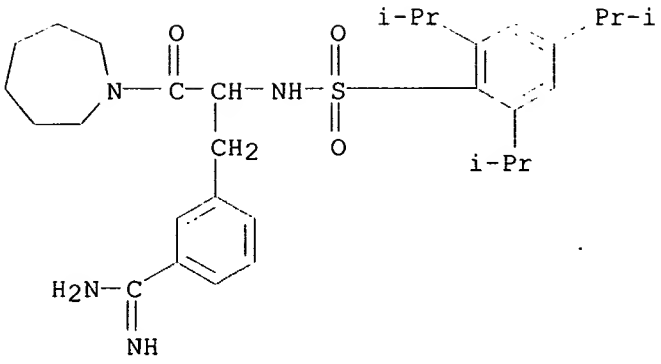
RN 256430-70-3 CAPLUS
CN Pyrrolidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



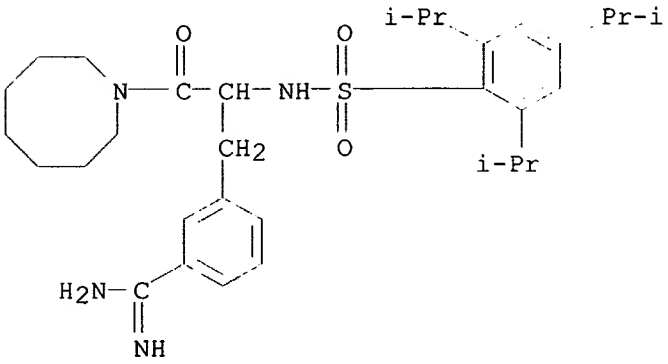
RN 256430-72-5 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



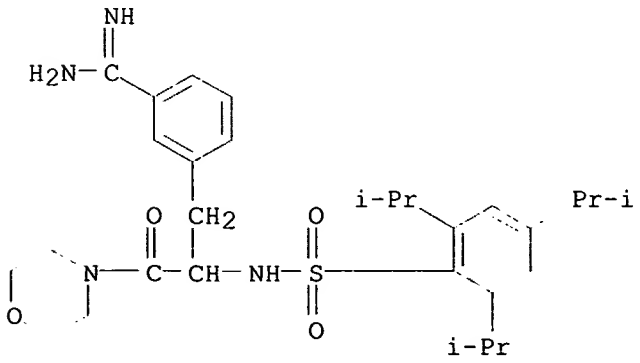
RN 256430-74-7 CAPLUS
CN 1H-Azepine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]hexahydro- (9CI) (CA INDEX NAME)



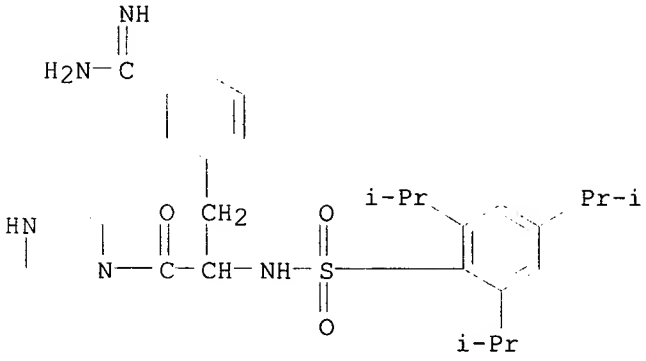
RN 256430-76-9 CAPLUS
CN Azocine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]octahydro- (9CI) (CA INDEX NAME)



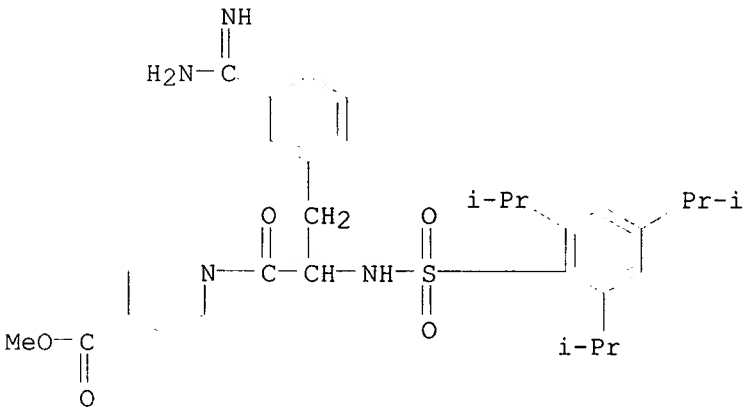
RN 256430-78-1 CAPLUS
CN Morpholine, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



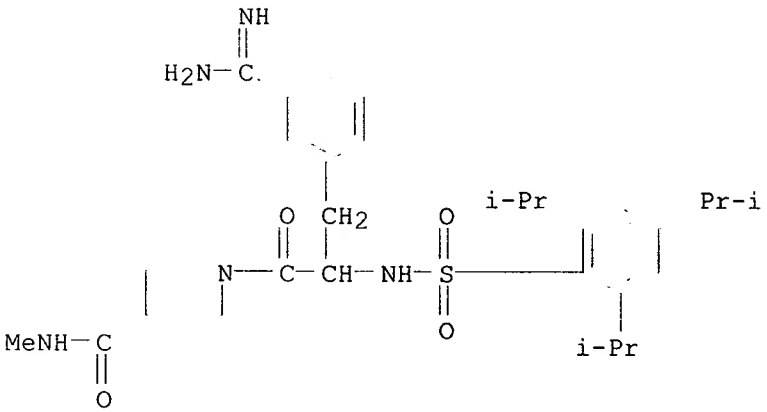
RN 256430-80-5 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 256430-84-9 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)

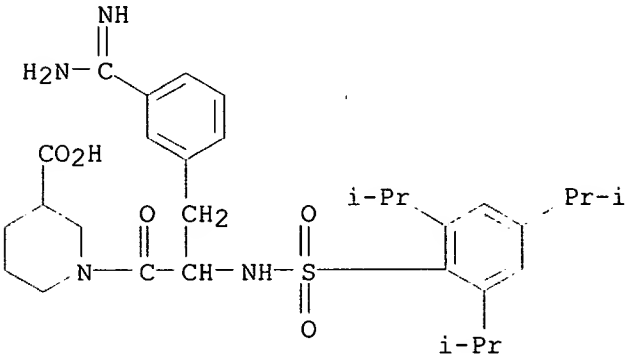


RN 256430-86-1 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-methyl- (9CI) (CA INDEX NAME)

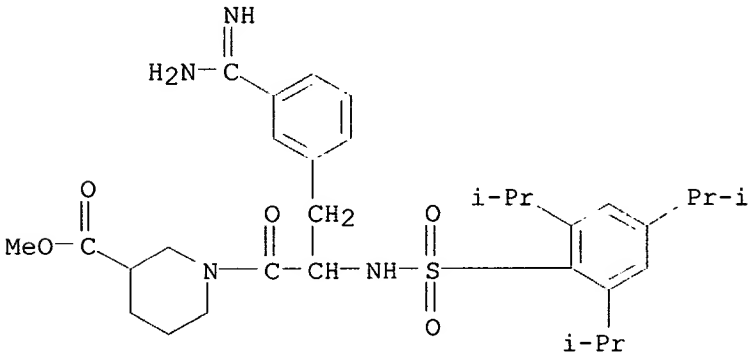


RN 256430-88-3 CAPLUS

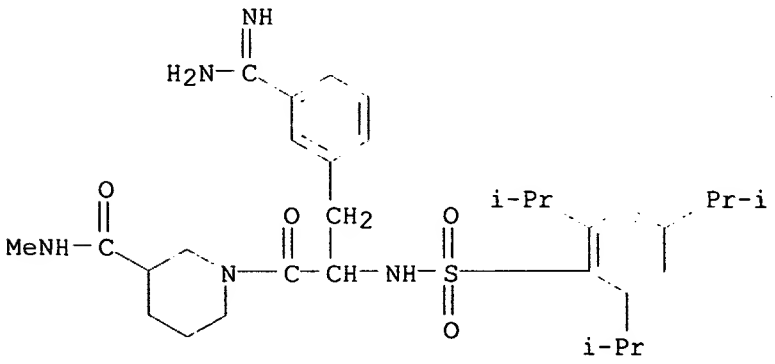
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 256430-90-7 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)



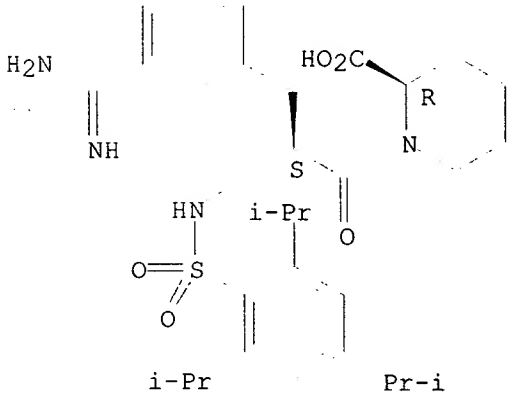
RN 256430-92-9 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 256430-93-0 CAPLUS

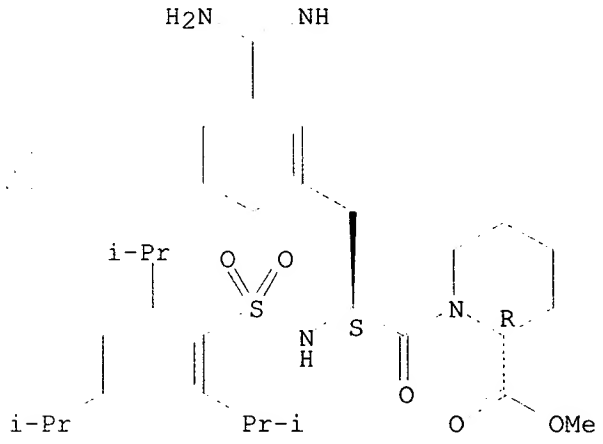
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

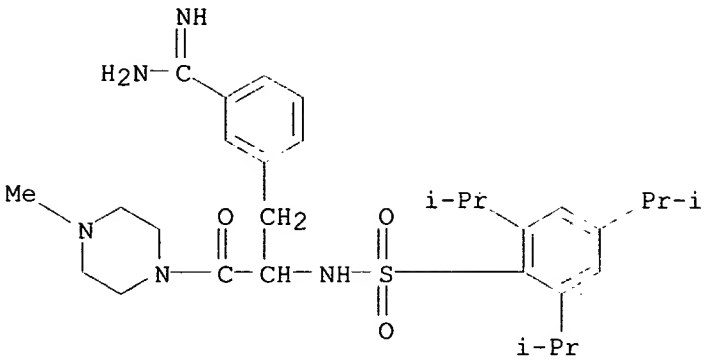


RN 256430-94-1 CAPLUS
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester, (2R)- (9CI) (CA INDEX NAME)

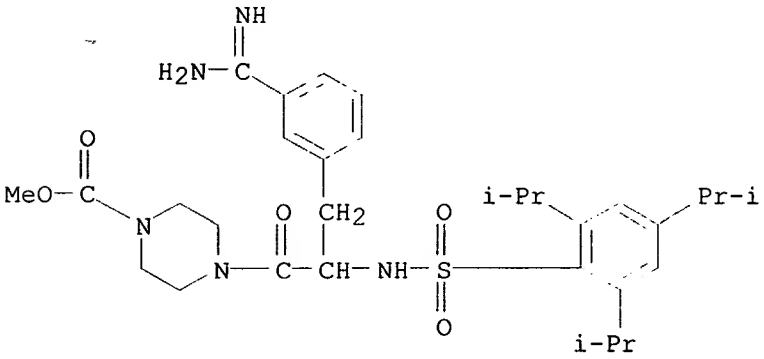
Absolute stereochemistry.



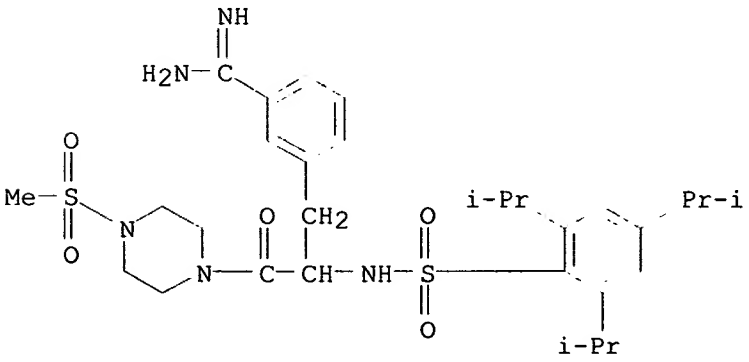
RN 256430-95-2 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 256430-96-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 256431-01-3 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

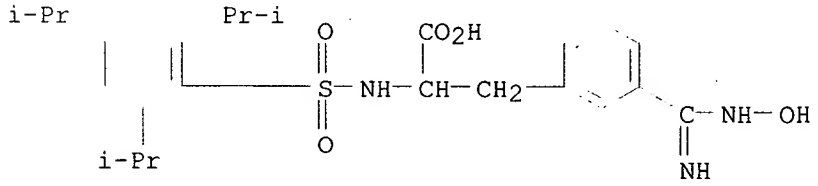


IT **9039-53-6, Urokinase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(amidinophenylalanine-based inhibitors of **urokinase**)
RN 9039-53-6 CAPLUS

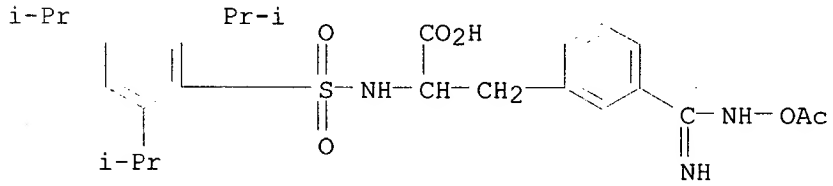
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **256430-55-4P 256430-57-6P 256430-58-7DP,**
derivs. **256430-62-3DP**, derivs.
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(amidinophenylalanine-based inhibitors of **urokinase**)

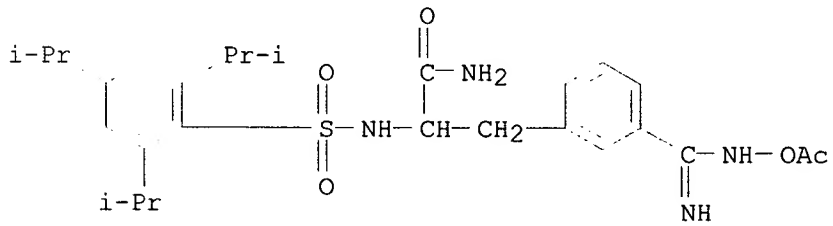
RN 256430-55-4 CAPLUS
CN Phenylalanine, 3-[(hydroxyamino)iminomethyl]-N-[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



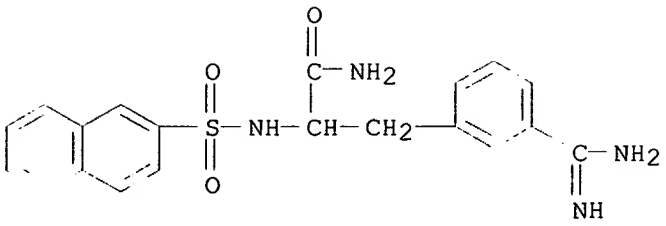
RN 256430-57-6 CAPLUS
CN Phenylalanine, 3-[[(acetyloxy)amino]iminomethyl]-N-[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]- (9CI) (CA INDEX NAME)



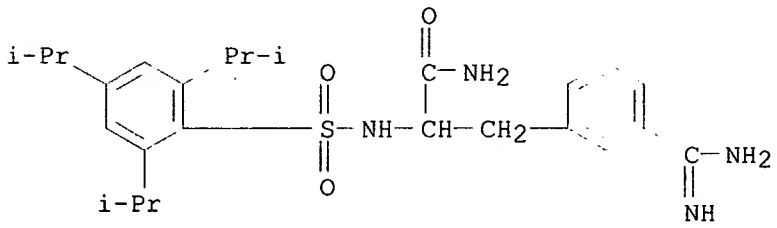
RN 256430-58-7 CAPLUS
CN Benzenepropanamide, 3-[[(acetyloxy)amino]iminomethyl]-.alpha.-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



RN 256430-62-3 CAPLUS
CN Benzenepropanamide, 3-(aminoiminomethyl)-.alpha.-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



IT **256430-60-1DP**, derivs.
RL: SPN (Synthetic preparation); PREP (Preparation)
(amidinophenylalanine-based inhibitors of **urokinase**)
RN 256430-60-1 CAPLUS
CN Benzenepropanamide, 3-(aminoiminomethyl)-.alpha.-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 10 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:768652 CAPLUS
DOCUMENT NUMBER: 130:162738
TITLE: Structural and Functional Analyses of Benzamidine-Based Inhibitors in Complex with Trypsin: Implications for the Inhibition of Factor Xa, tPA, and **Urokinase**
AUTHOR(S): Renatus, Martin; Bode, Wolfram; Huber, Robert; Stuerzebecher, Joerg; Stubbs, Milton T.
CORPORATE SOURCE: Abteilung Strukturforschung, Max-Planck-Institut fuer Biochemie, Martinsried, D-82152, Germany
SOURCE: Journal of Medicinal Chemistry (1998), 41(27), 5445-5456
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

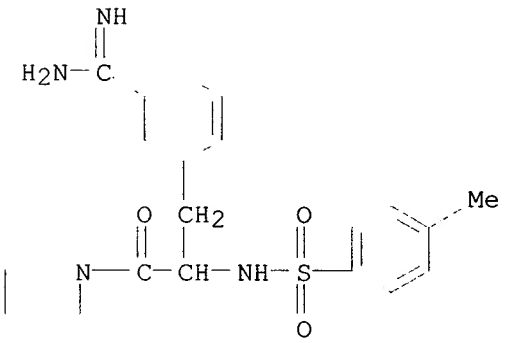
December 3, 98 fax Translation via overnight

AB The trypsin-like serine proteinase superfamily contains a no. of potential therapeutic targets, many of which are unsuitable for routine x-ray crystallog. studies. We have cocrystd. a selection of benzamidine-based inhibitors with bovine trypsin and solved their structures to a resoln. of up to 1.7 .ANG.. Despite similar chem. formulas, the inhibitors exhibit a range of diverse binding modes that reflect their inhibitory spectra against the serine proteinases trypsin, thrombin, factor Xa, tissue-type plasminogen activator (tPA) and urokinase (uPA). In contrast to the compact folded conformations of thrombin inhibitors which allow optimal binding in the well-defined hydrophobic S2/S4 pocket of thrombin, those effective against factor Xa exhibit an extended conformation that allows occupation of the S3/S4 region, where hydrophobic and electrostatic interactions can stabilize the conformation. One group of inhibitors contg. an N-terminal 2,4,6-triisopropylphenylsulfonyl (TIPPS) moiety show

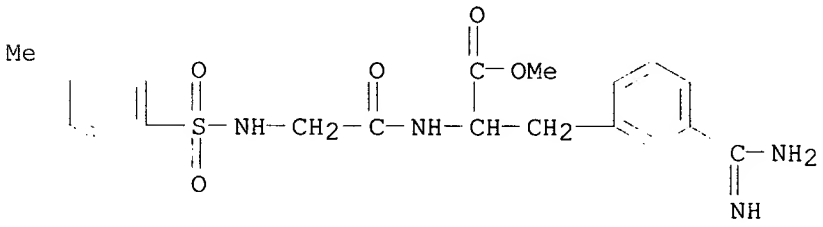
little or no penetration into the S3/S4 subsites of trypsin. These latter sites are occluded in uPA, explaining why this class of compds. is effective against uPA. Despite presenting an extensive hydrophobic surface toward the solvent, the Ki values for TIPPS-contg. compds. against trypsin is in the range 10-7 to 10-8 M. Comparison of the binding of a bis-benzamidine inhibitor in trypsin and tPA indicate that a shift in potency can be induced by relatively minor changes in binding mode. Implications for the inhibition of these proteinases are discussed.

IT **73438-63-8 114498-49-6 117091-16-4**
121803-67-6 199607-63-1 220355-61-3
220355-62-4 220355-63-5 220355-64-6
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(structural and functional analyses of benzamidine-based inhibitors in complex with trypsin-like serine proteinases)

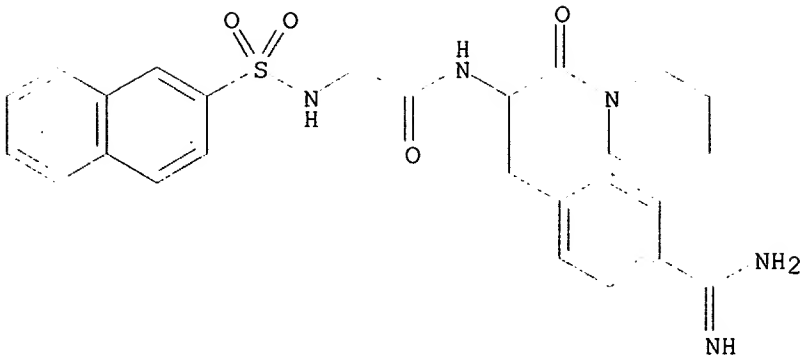
RN 73438-63-8 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



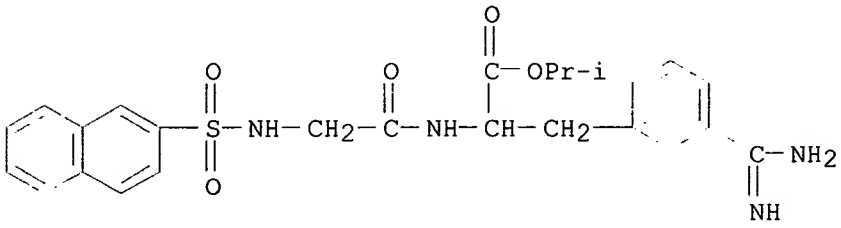
RN 114498-49-6 CAPLUS
CN Phenylalanine, N-[(4-methylphenyl)sulfonyl]glycyl-3-(aminoiminomethyl)-, methyl ester (9CI) (CA INDEX NAME)



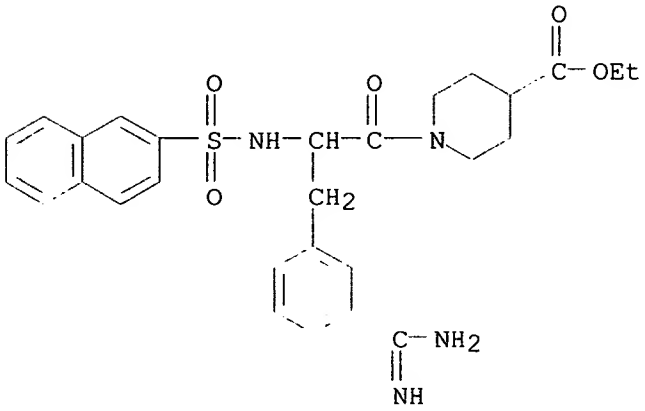
RN 117091-16-4 CAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



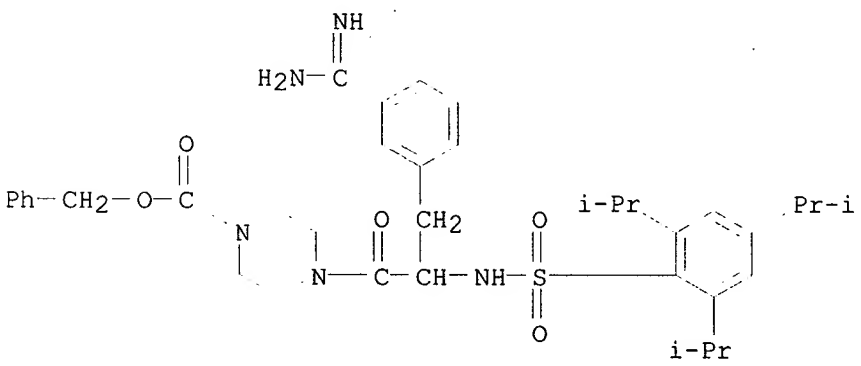
RN 121803-67-6 CAPLUS
CN Phenylalanine, 3-(aminoiminomethyl)-N-[N-(2-naphthalenylsulfonyl)glycyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



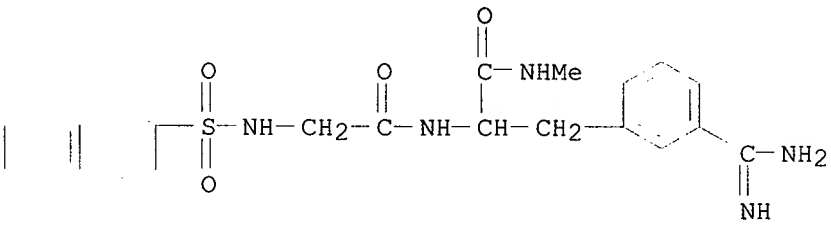
RN 199607-63-1 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 220355-61-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

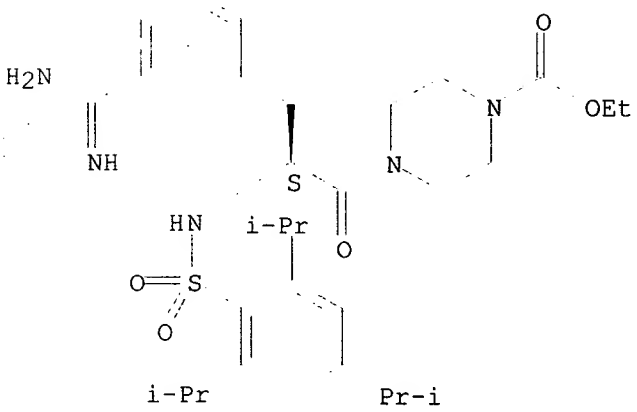


RN 220355-62-4 CAPLUS
CN Phenylalaninamide, N-(2-naphthalenylsulfonyl)glycyl-3-(aminoiminomethyl)-N-methyl- (9CI) (CA INDEX NAME)

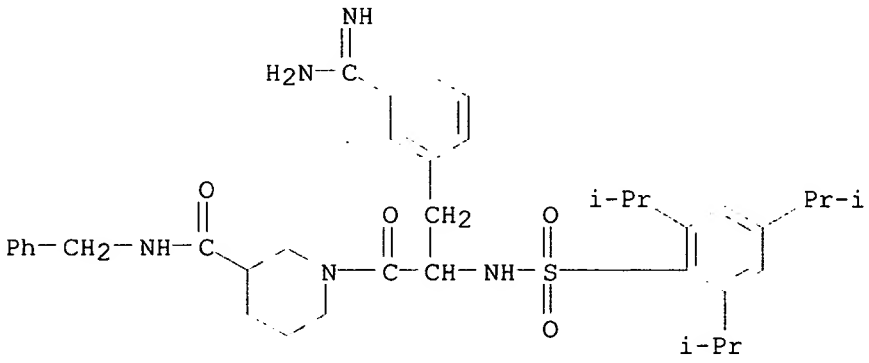


RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 220355-64-6 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)

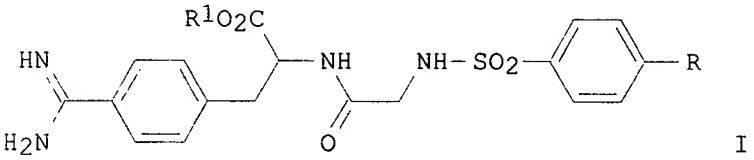


IT **9039-53-6, Urokinase**
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PROC (Process)
(structural and functional analyses of benzamidine-based inhibitors in complex with trypsin-like serine proteinases)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

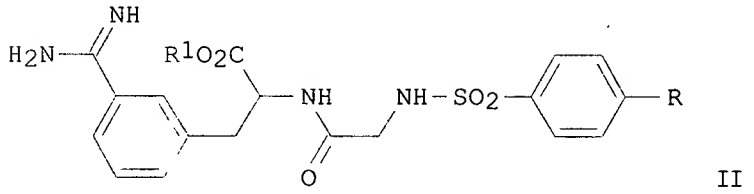
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 11 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1998:609677 CAPLUS
DOCUMENT NUMBER: 129:316535
TITLE: Design of Benzamidine-Type Inhibitors of Factor Xa
AUTHOR(S): Gabriel, Bernhard; Stubbs, Milton T.; Bergner, Andreas; Hauptmann, Joerg; Bode, Wolfram; Stuerzebecher, Joerg; Moroder, Luis
CORPORATE SOURCE: Max-Planck-Institut fuer Biochemie, Martinsried, D-82152, Germany
SOURCE: Journal of Medicinal Chemistry (1998), 41(22), 4240-4250
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

9/24/98



I



II

AB A series of derivs. of racemic (benzenesulfonyl)glycylamidinylphenylalanin e derivs. I and II [R = C(NH2):NH, CN, CSNH2; R1 = H, Et] was synthesized as potential inhibitors of factor Xa (fXa). Among these, I [R = C(NH2):NH, R1 = Et] (III) exhibits the highest affinity for fXa despite the unfavored location of the amidino substituent in the para position. X-ray structural anal. of the trypsin complex with III revealed a retro-binding mode if compared to those of similar compds., so far analyzed in complexes with trypsin or fXa. This noncanonical binding mode as well as its slow plasma clearance rates in rats, if compared to those of other benzamidine derivs., suggests this compd. as an interesting new lead structure for the design of fXa inhibitors.

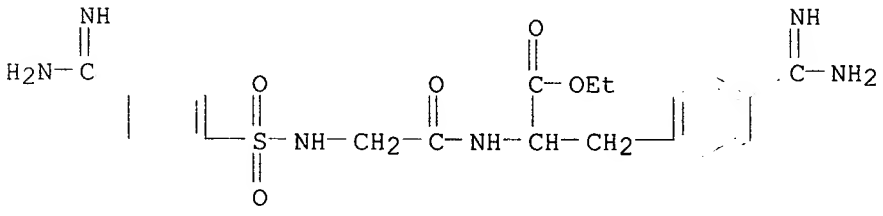
IT **214842-84-9P 214842-91-8P 214843-04-6P**
214843-11-5P 214843-21-7P 214843-27-3P
214843-75-1P 214843-80-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(design and synthesis of benzamidine factor Xa inhibitors)

RN 214842-84-9 CAPLUS

CN Phenylalanine, N-[[4-(aminoiminomethyl)phenyl]sulfonyl]glycyl-4-(aminoiminomethyl)-, ethyl ester, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

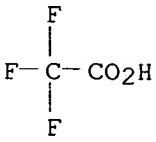
CM 1

CRN 214842-83-8
CMF C21 H26 N6 O5 S



CM 2

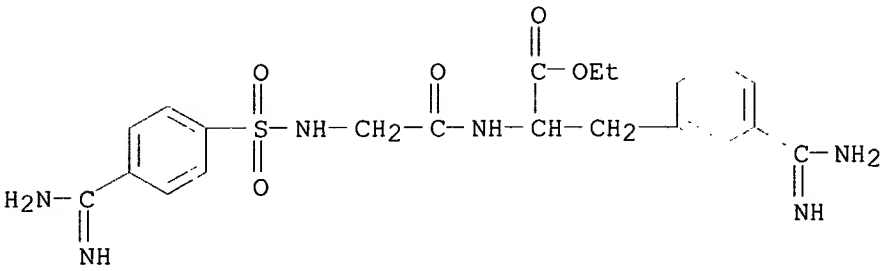
CRN 76-05-1
CMF C2 H F3 O2



RN 214842-91-8 CAPLUS
CN Phenylalanine, N-[[4-(aminoiminomethyl)phenyl]sulfonyl]glycyl-3-(aminoiminomethyl)-, ethyl ester, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

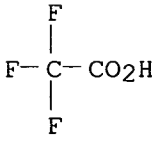
CM 1

CRN 214842-90-7
CMF C21 H26 N6 O5 S



CM 2

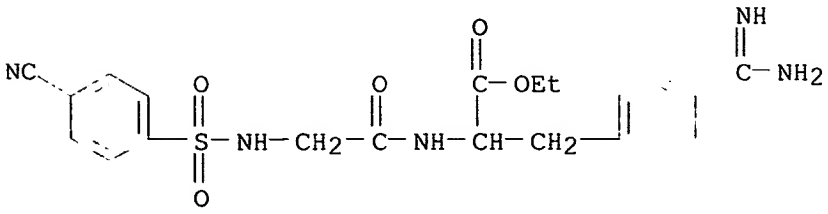
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-04-6 CAPLUS
CN Phenylalanine, N-[(4-cyanophenyl)sulfonyl]glycyl-4-(aminoiminomethyl)-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

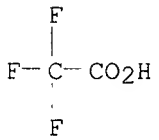
CM 1

CRN 214843-03-5
CMF C21 H23 N5 O5 S



CM 2

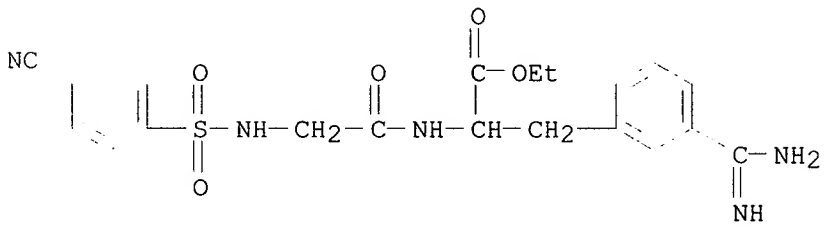
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-11-5 CAPLUS
CN Phenylalanine, N-[(4-cyanophenyl)sulfonyl]glycyl-3-(aminoiminomethyl)-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

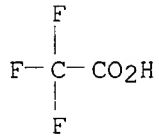
CM 1

CRN 214843-10-4
CMF C21 H23 N5 O5 S



CM 2

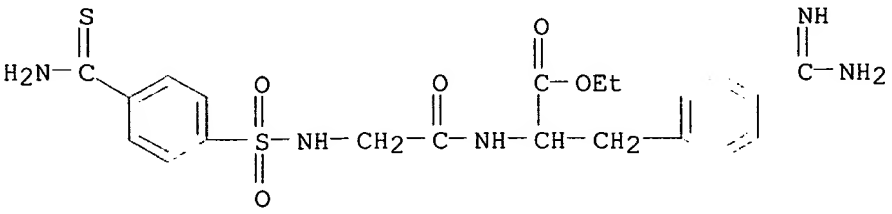
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-21-7 CAPLUS
CN Phenylalanine, N-[[4-(aminothioxomethyl)phenyl]sulfonyl]glycyl-4-(aminoiminomethyl)-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

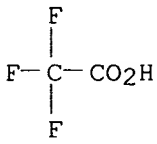
CM 1

CRN 214843-20-6
CMF C21 H25 N5 O5 S2



CM 2

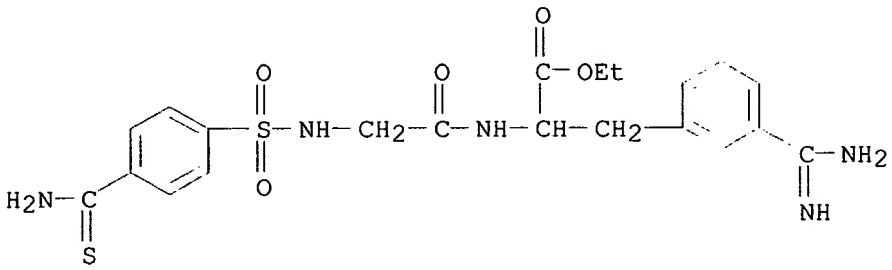
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-27-3 CAPLUS
CN Phenylalanine, N-[[4-(aminothioxomethyl)phenyl]sulfonyl]glycyl-3-(aminoiminomethyl)-, ethyl ester, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

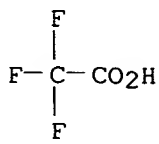
CM 1

CRN 214843-26-2
CMF C21 H25 N5 O5 S2



CM 2

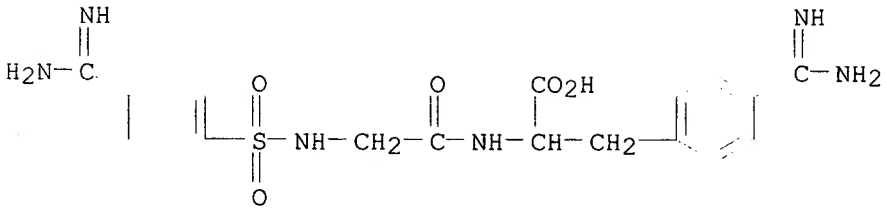
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-75-1 CAPLUS
CN Phenylalanine, N-[[4-(aminoiminomethyl)phenyl]sulfonyl]glycyl-4-(aminoiminomethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

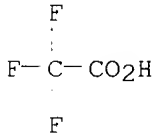
CM 1

CRN 214843-74-0
CMF C19 H22 N6 O5 S



CM 2

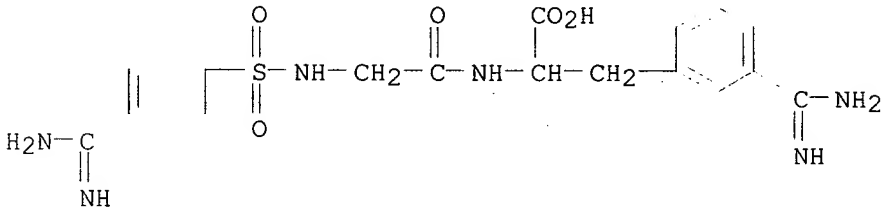
CRN 76-05-1
CMF C2 H F3 O2



RN 214843-80-8 CAPLUS
CN Phenylalanine, N-[[4-(aminoiminomethyl)phenyl]sulfonyl]glycyl-3-(aminoiminomethyl)-, bis(trifluoroacetate) (9CI) (CA INDEX NAME)

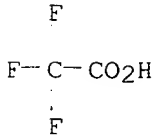
CM 1

CRN 214843-79-5
CMF C19 H22 N6 O5 S



CM 2

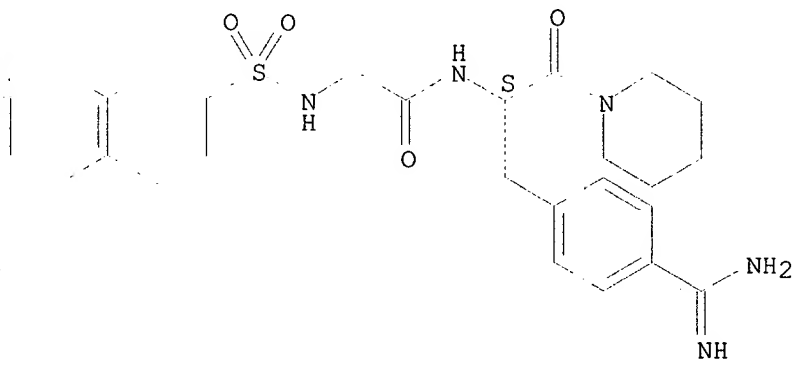
CRN 76-05-1
CMF C2 H F3 O2



IT **139639-24-0, Urokinase**-type plasminogen activator
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(design and synthesis of benzamidine factor Xa inhibitors)
RN 139639-24-0 CAPLUS

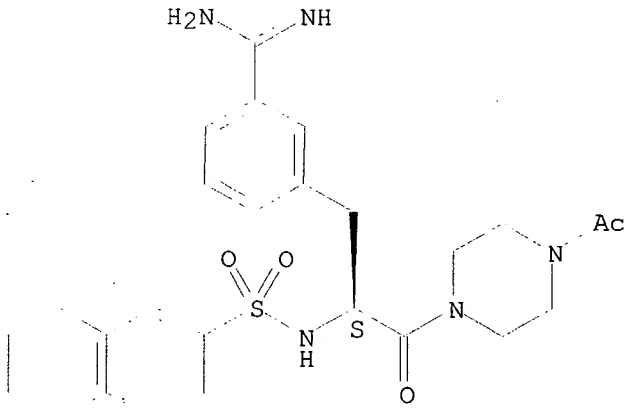
L47 ANSWER 12 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1997:564960 CAPLUS
DOCUMENT NUMBER: 127:171089
TITLE: Synthesis and Structure-Activity Relationships of Potent Thrombin Inhibitors: Piperazides of 3-Amidinophenylalanine
AUTHOR(S): Stuerzebecher, Joerg; Prasa, Dagmar; Hauptmann, Joerg; Vieweg, Helmut; Wikstroem, Peter
CORPORATE SOURCE: Klinikum der Friedrich-Schiller-Universitaet Jena, Zentrum fuer Vaskulaere Biologie und Medizin, Erfurt, D-99089, Germany
SOURCE: Journal of Medicinal Chemistry (1997), 40(19), 3091-3099
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Thrombin is the key enzyme in the blood coagulation system, and inhibitors of its proteolytic activity are of therapeutic interest since they are potential anticoagulants. The most potent inhibitor of the benzamidine type is N.alpha.-[(2-naphthylsulfonyl)glycyl]-4-amidinophenylalaninylpiperidide (NAPAP). However, NAPAP and other benzamidine derivs. do not show favorable pharmacol. properties; above all, they have very low systemic bioavailability after oral administration. The goal of designing new compds. was to obtain potent inhibitors with improved pharmacokinetic properties. Piperazide derivs. of 3-amidinophenylalanine as the key building block were synthesized. The piperazine moiety opened the possibility to introduce different substituents on the second nitrogen using common synthetic procedures. Some of the newly synthesized compds. are potent inhibitors of thrombin and offer an approach to study structure-function relationships for inhibition of thrombin and related enzymes and for the improvement of their pharmacokinetic properties.
IT **86845-59-2 161357-53-5**
RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(prepn. and structure-activity relations of piperazides of amidinophenylalanine as thrombin inhibitors)
RN 86845-59-2 CAPLUS
CN Acetamide, N-[(1S)-1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



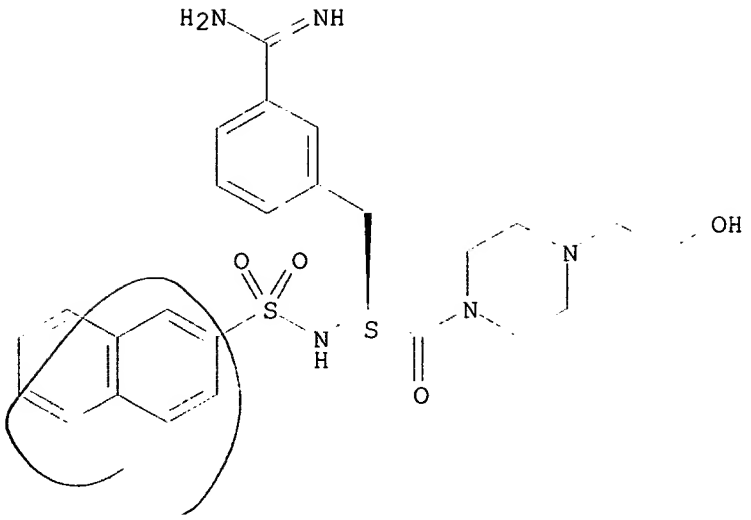
RN 161357-53-5 CAPLUS
CN Piperazine, 1-acetyl-4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **161357-29-5P 161357-31-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. and structure-activity relations of piperazides of amidinophenylalanine as thrombin inhibitors)
RN 161357-29-5 CAPLUS
CN 1-Piperazineethanol, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, dihydrochloride, (S)- (9CI) (CA INDEX NAME)

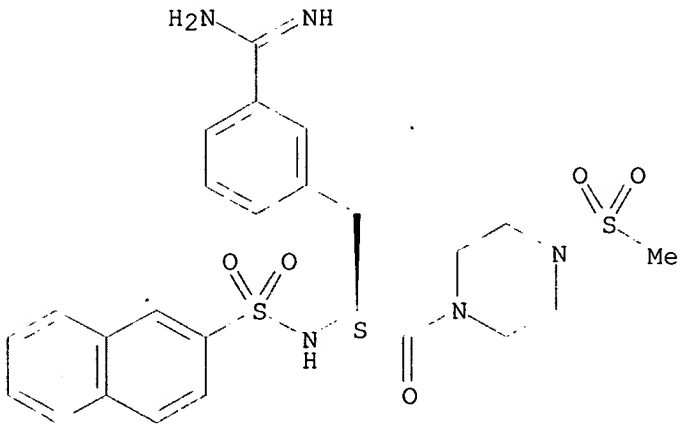
Absolute stereochemistry.



●2 HCl

RN 161357-31-9 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(methylsulfonyl)-, monohydrochloride, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



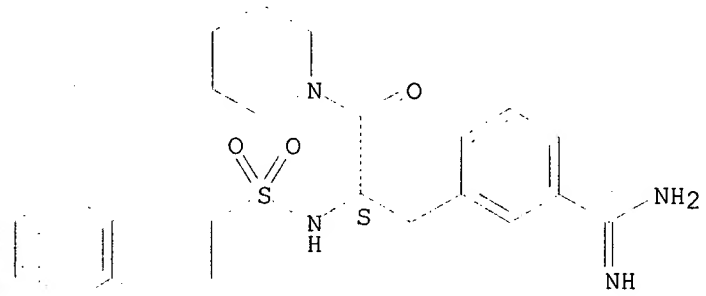
● HCl

IT **159702-06-4 159702-07-5 161357-66-0**
161442-60-0 161442-63-3 161442-66-6
169388-31-2 169531-63-9 169531-64-0
193900-72-0 193900-73-1 193900-74-2
193900-75-3 193900-76-4 193900-77-5
193900-78-6 193900-79-7 193900-80-0
193900-81-1 193900-82-2 193900-84-4
193900-85-5 193900-87-7 193900-88-8
193900-89-9 193900-90-2 193900-91-3
193900-92-4 193900-93-5 193900-94-6
194085-30-8 194085-31-9 194085-32-0

194085-33-1 194085-34-2 194085-36-4
194085-37-5 194085-38-6 194085-39-7
194085-40-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. and structure-activity relations of piperazides of amidinophenylalanine as thrombin inhibitors)

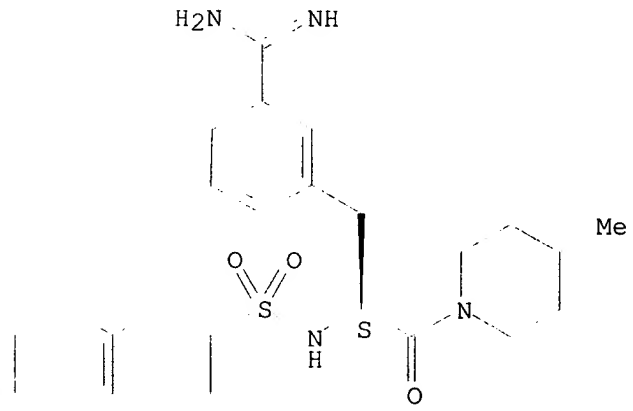
RN 159702-06-4 CAPLUS
CN Piperidine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



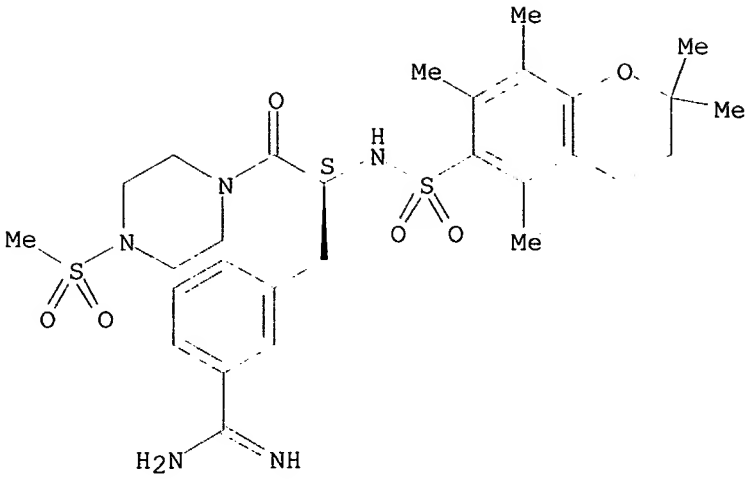
RN 159702-07-5 CAPLUS
CN Piperidine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



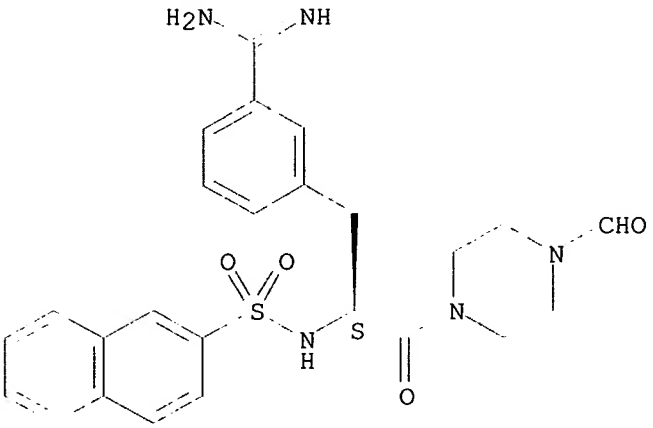
RN 161357-66-0 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



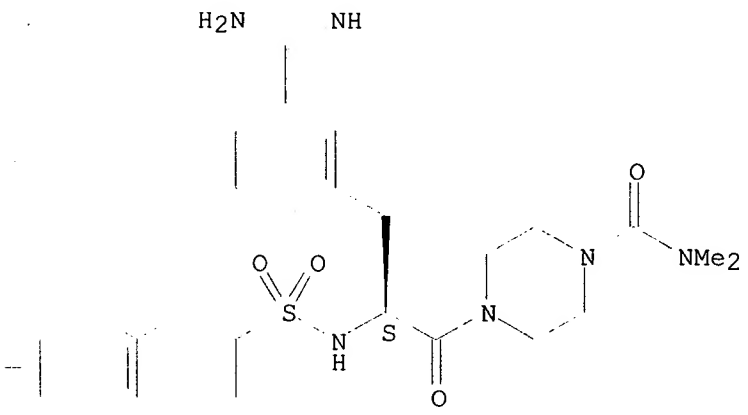
RN 161442-60-0 CAPLUS
CN 1-Piperazinecarboxaldehyde, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



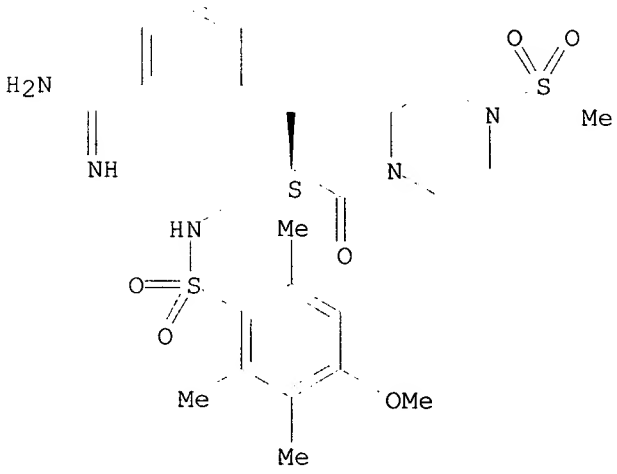
RN 161442-63-3 CAPLUS
CN 1-Piperazinecarboxamide, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

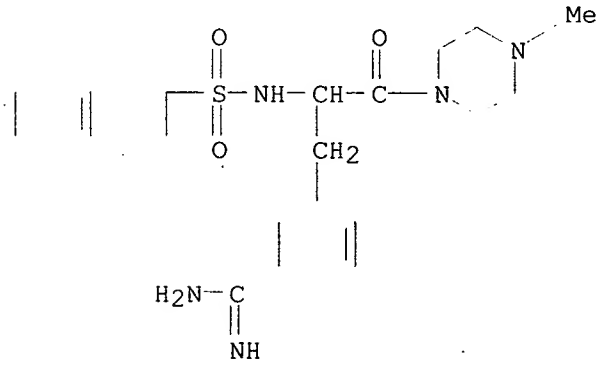


RN 161442-66-6 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

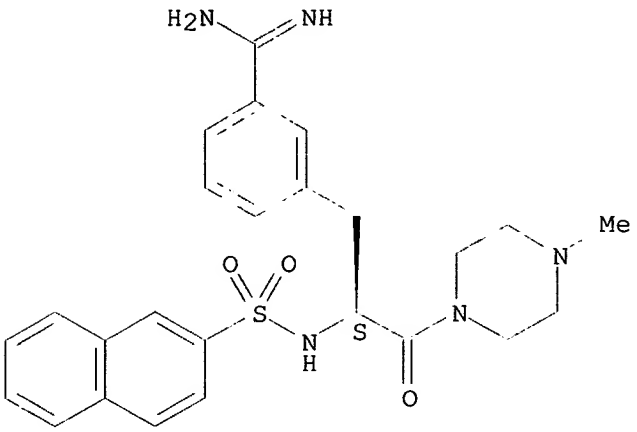


RN 169388-31-2 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)



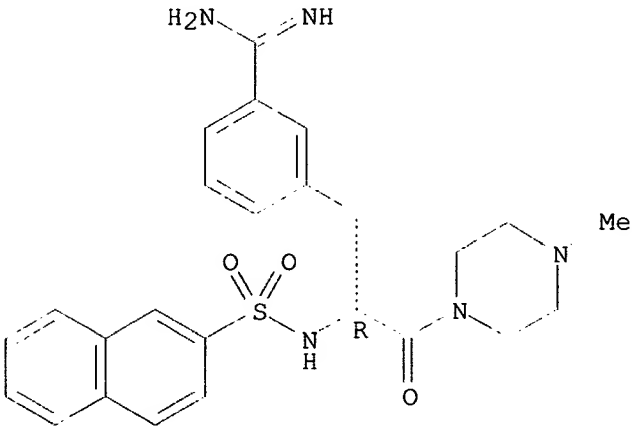
RN 169531-63-9 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



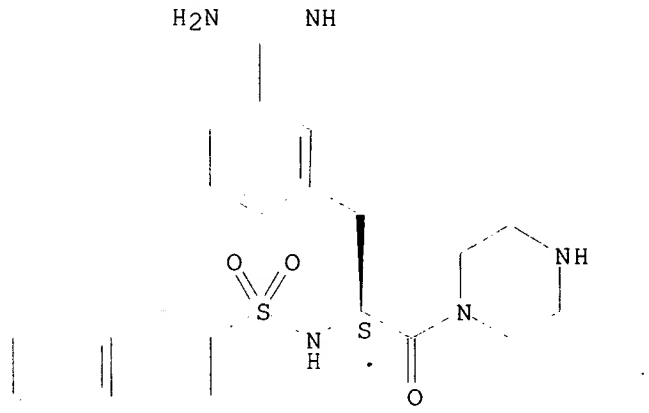
RN 169531-64-0 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



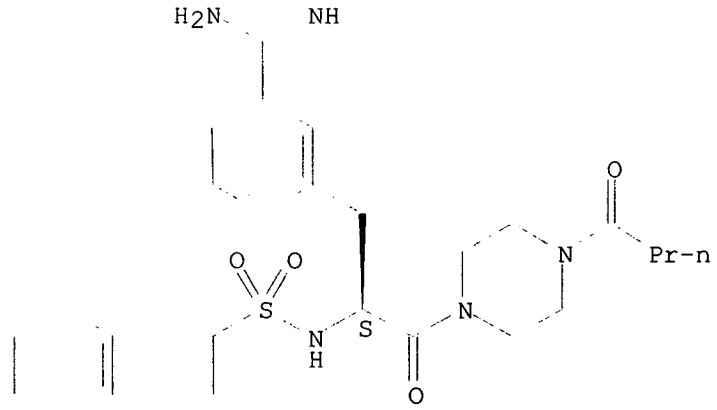
RN 193900-72-0 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



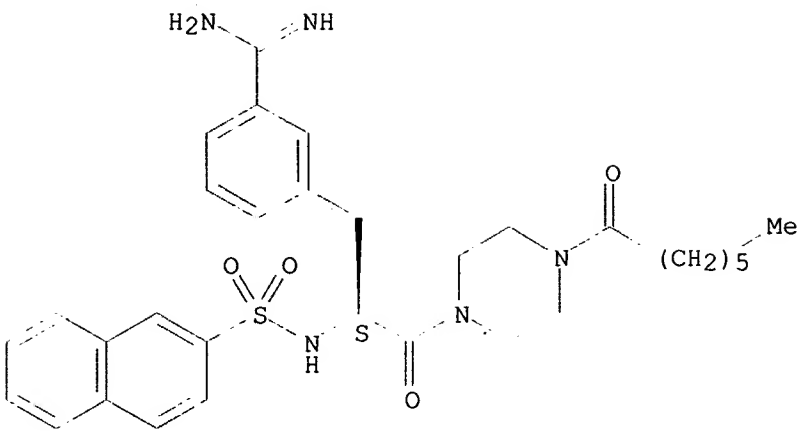
RN 193900-73-1 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(1-oxobutyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



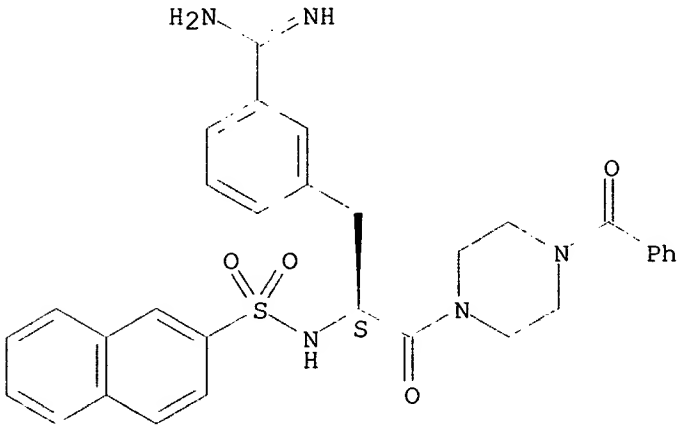
RN 193900-74-2 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(1-oxoheptyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



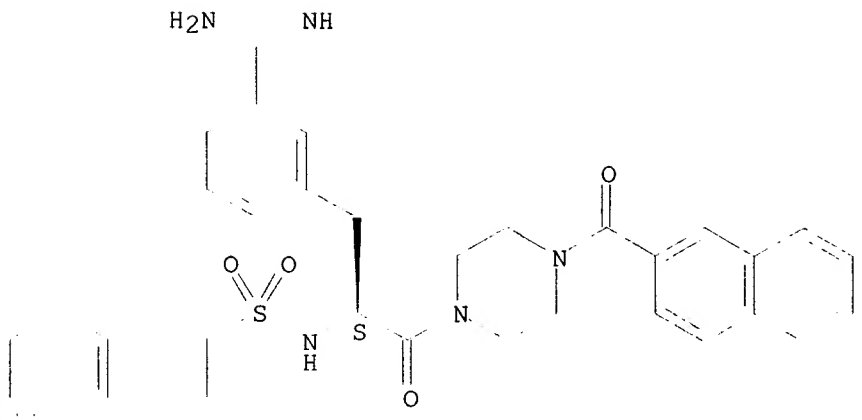
RN 193900-75-3 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-benzoyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



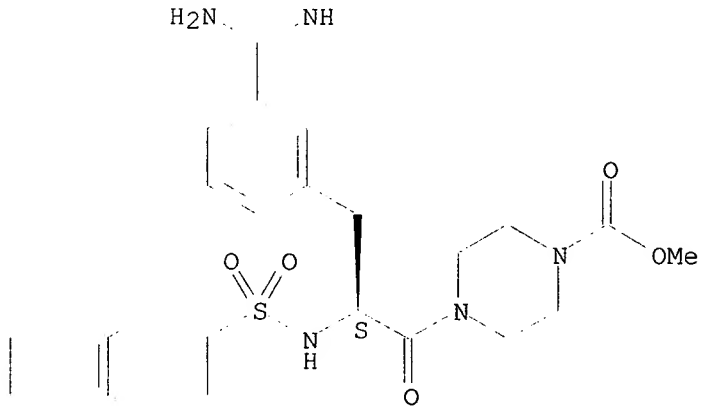
RN 193900-76-4 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(2-naphthalenylcarbonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



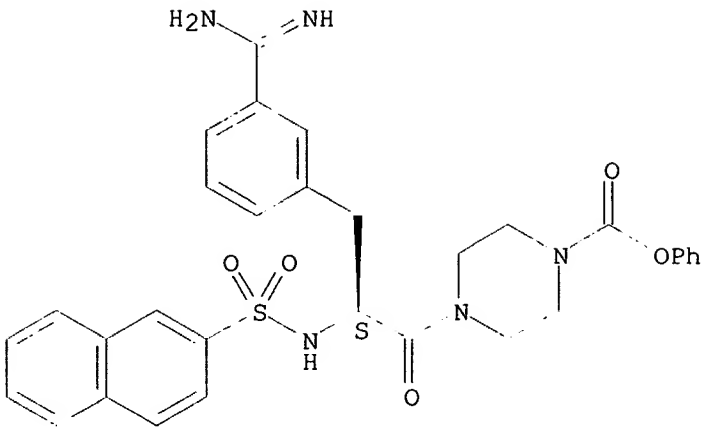
RN 193900-77-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



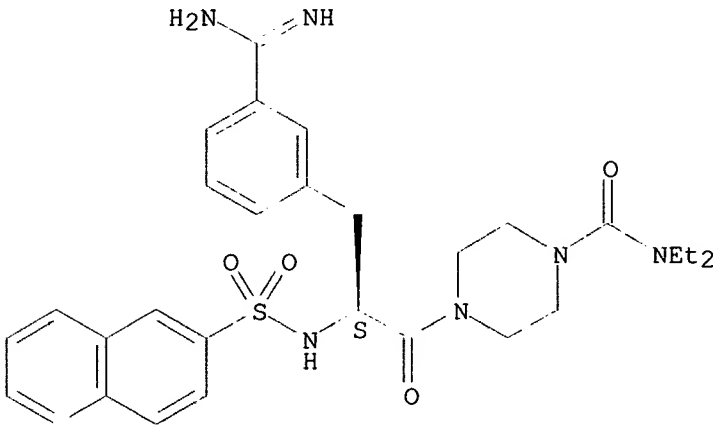
RN 193900-78-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, phenyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



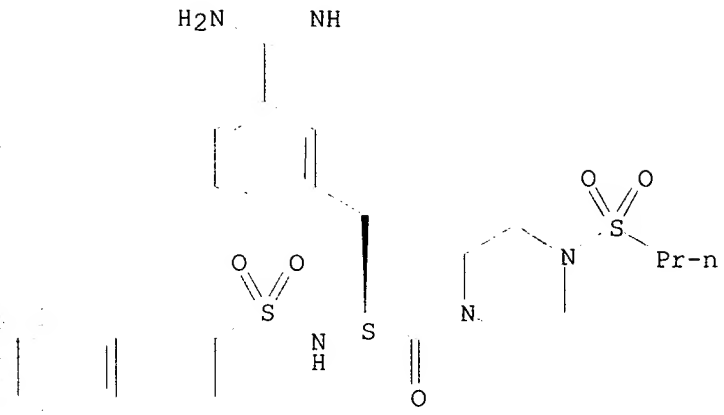
RN 193900-79-7 CAPLUS
CN 1-Piperazinecarboxamide, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-N,N-diethyl-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



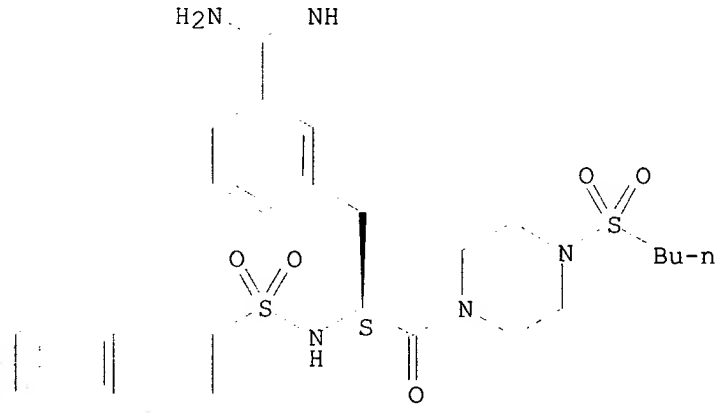
RN 193900-80-0 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(propylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



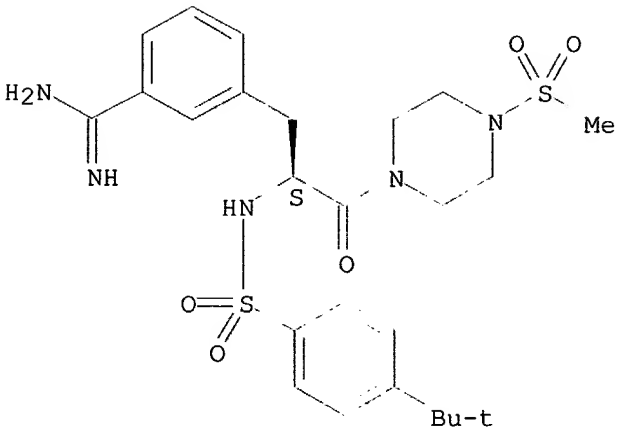
RN 193900-81-1 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(butylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



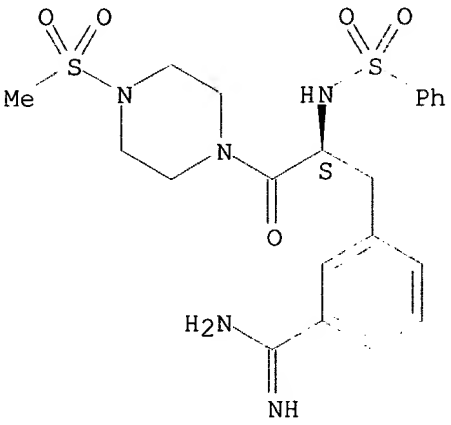
RN 193900-82-2 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[[[4-(1,1-dimethylethyl)phenyl]sulfonyl]amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



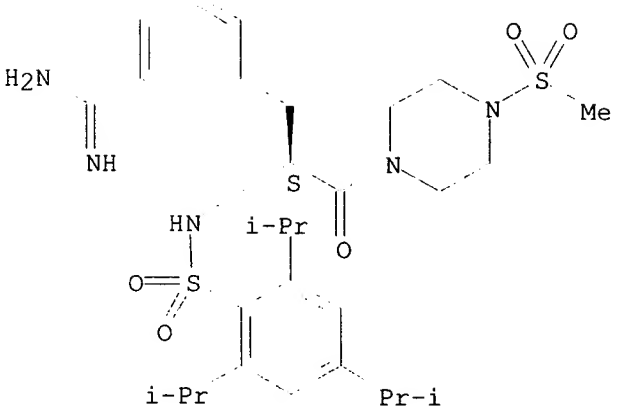
RN 193900-84-4 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(phenylsulfonyl)amino]-1-oxopropyl]-4-(methylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

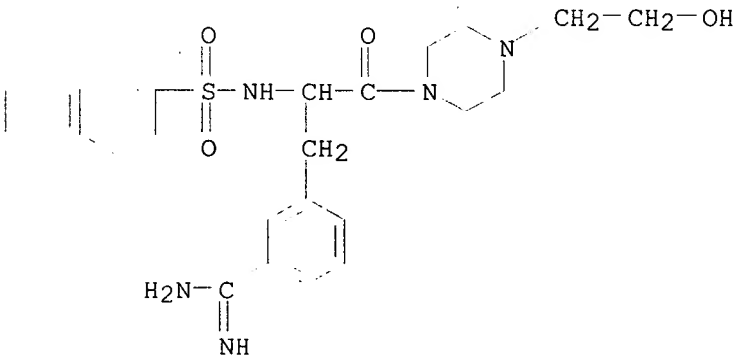


RN 193900-85-5 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

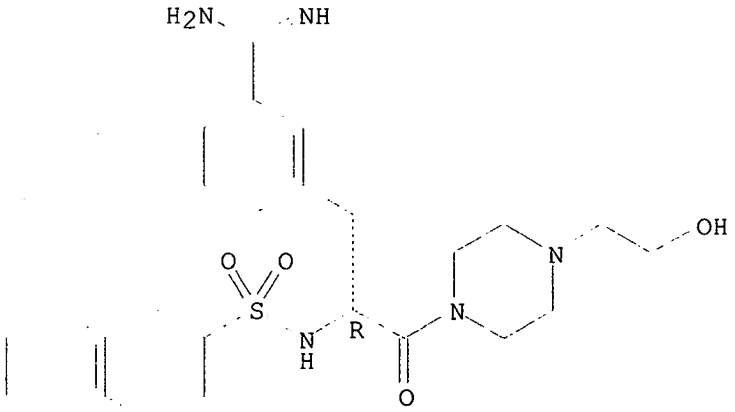


RN 193900-87-7 CAPLUS
CN 1-Piperazineethanol, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



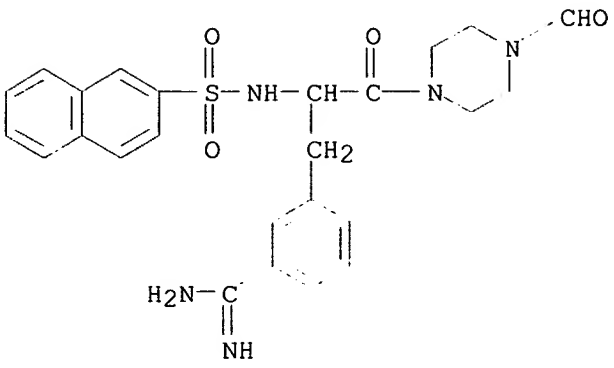
RN 193900-88-8 CAPLUS
CN 1-Piperazineethanol, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

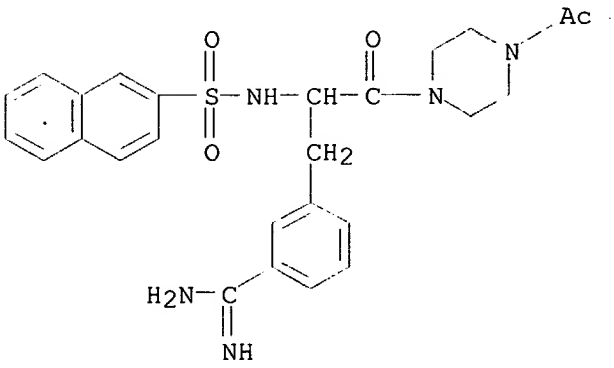


RN 193900-89-9 CAPLUS
CN 1-Piperazinecarboxaldehyde, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-

naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

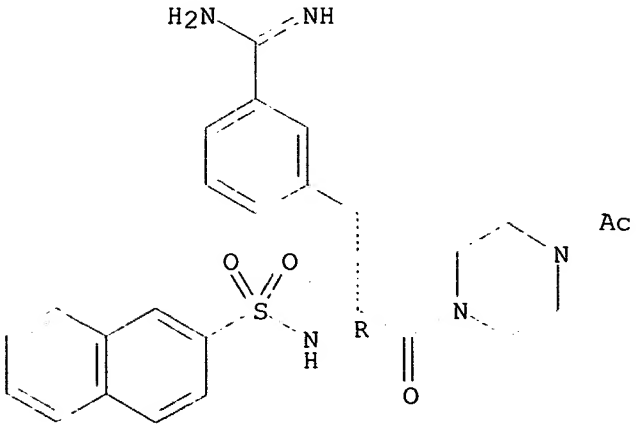


RN 193900-90-2 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



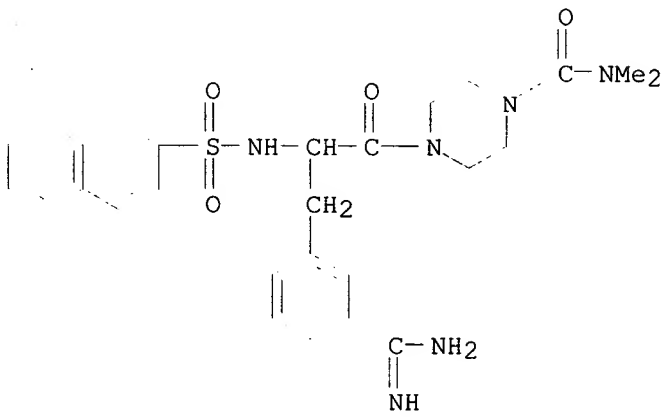
RN 193900-91-3 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

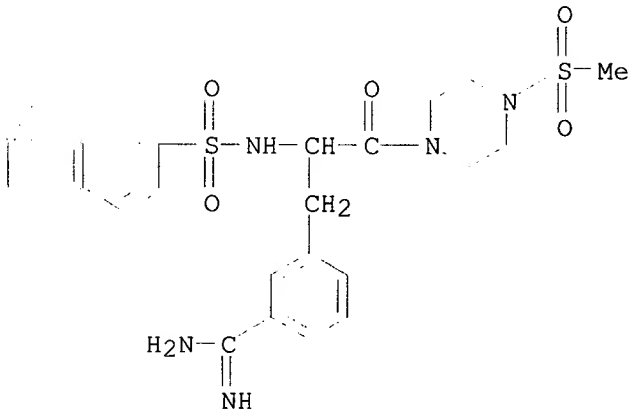


RN 193900-92-4 CAPLUS
CN 1-Piperazinecarboxamide, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-

naphthalenylsulfonyl)amino]-1-oxopropyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)

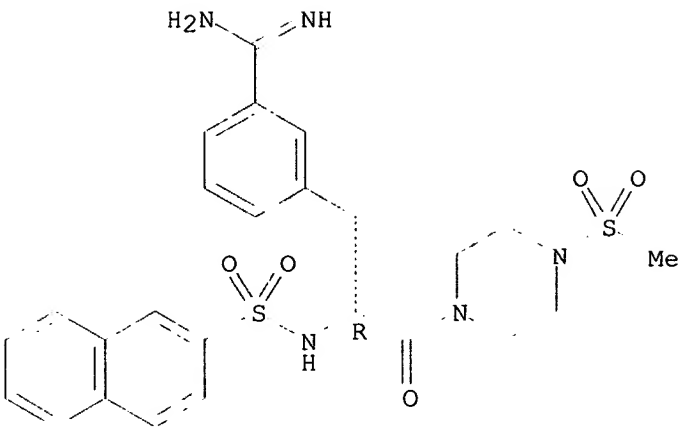


RN 193900-93-5 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)



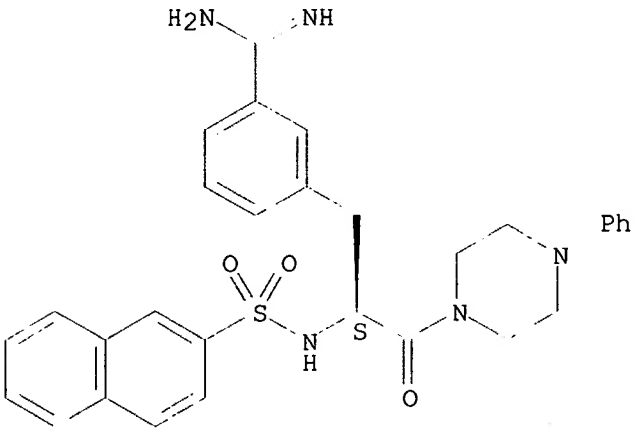
RN 193900-94-6 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(methylsulfonyl)-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



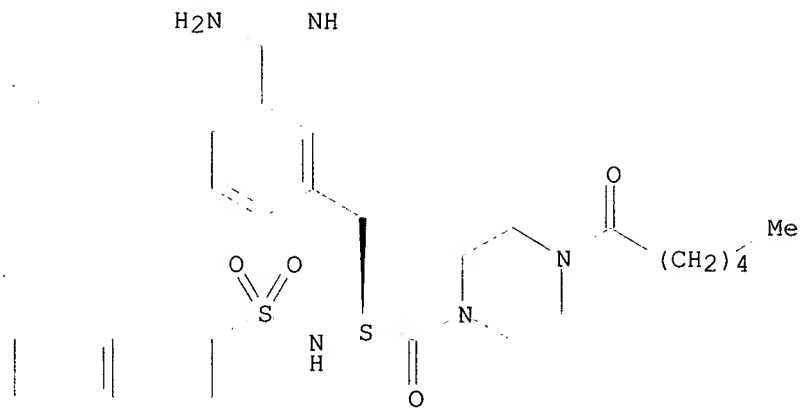
RN 194085-30-8 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-phenyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



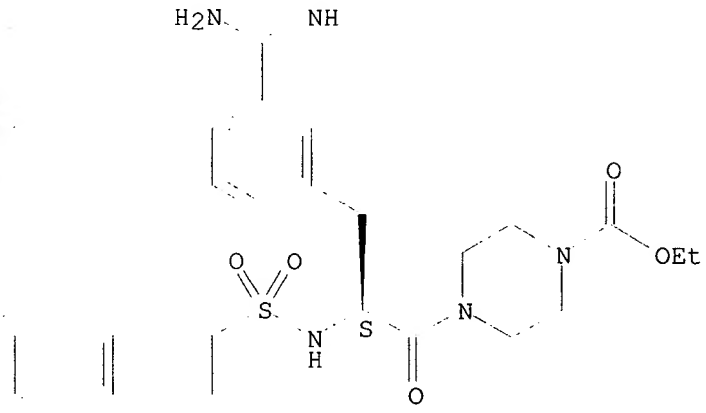
RN 194085-31-9 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(1-oxohexyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



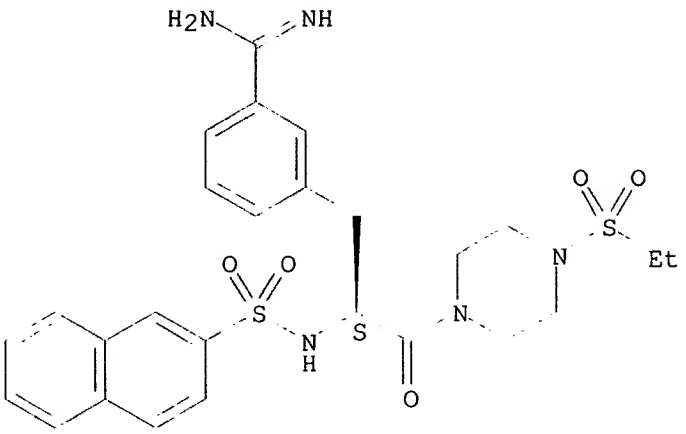
RN 194085-32-0 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



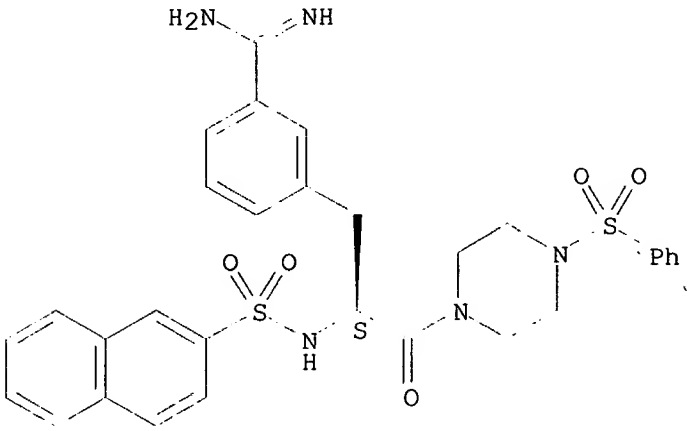
RN 194085-33-1 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(ethylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



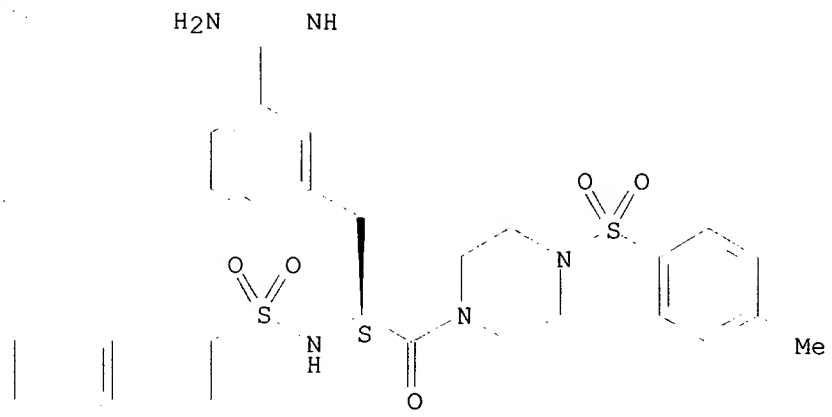
RN 194085-34-2 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(phenylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



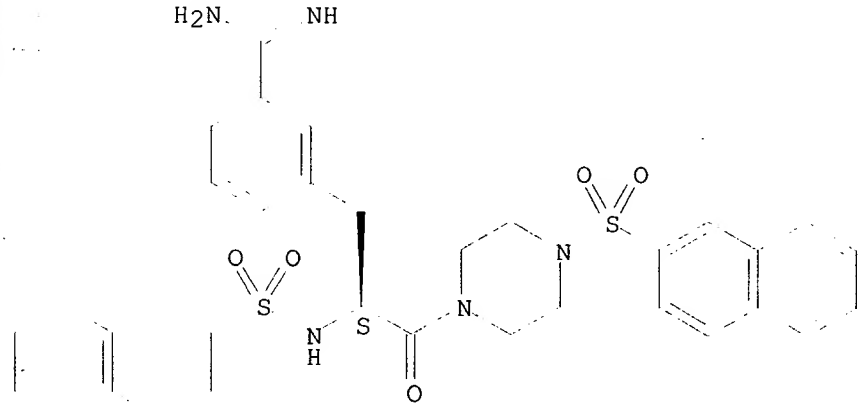
RN 194085-36-4 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-[(4-methylphenyl)sulfonyl]-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



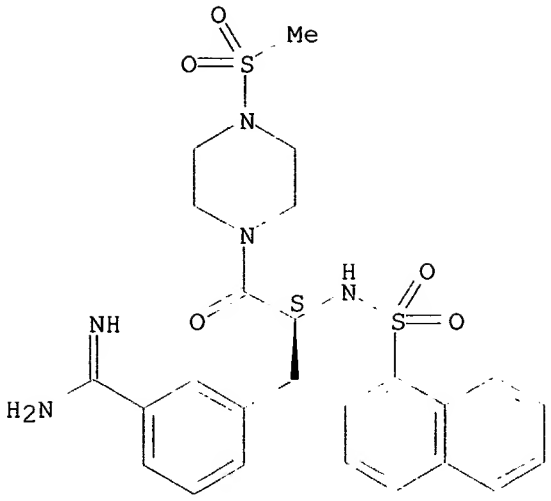
RN 194085-37-5 CAPLUS
CN Piperazine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(2-naphthalenylsulfonyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



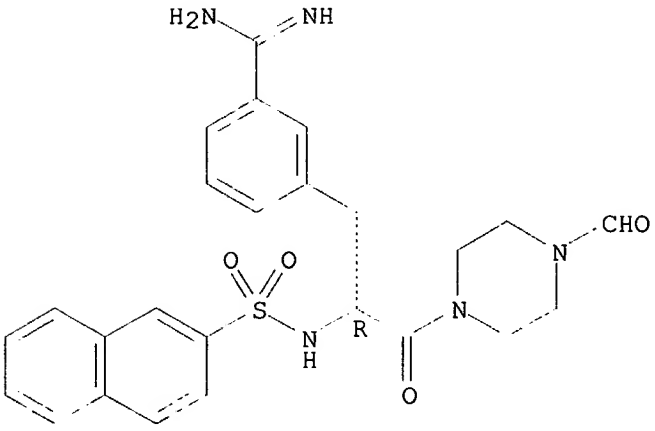
RN 194085-38-6 CAPLUS
CN Piperazine, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(1-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-(methylsulfonyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



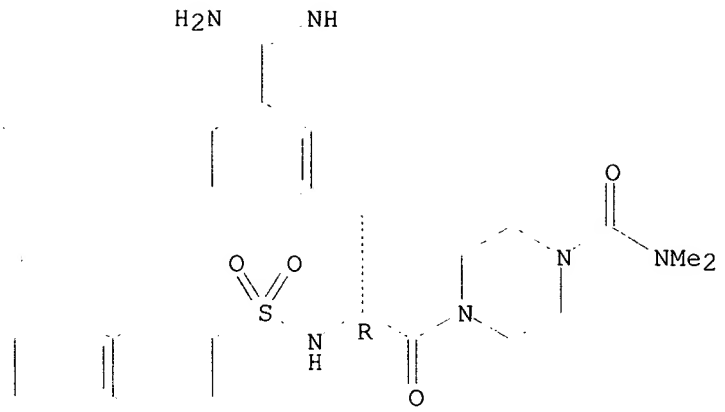
RN 194085-39-7 CAPLUS
CN 1-Piperazinecarboxaldehyde, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 194085-40-0 CAPLUS
CN 1-Piperazinecarboxamide, 4-[3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-N,N-dimethyl-, (R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **9039-53-6, Urokinase**
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(prepn. and structure-activity relations of piperazides of amidinophenylalanine as thrombin inhibitors)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L47 ANSWER 13 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1995:389760 CAPLUS
DOCUMENT NUMBER: 122:151379
TITLE: Fibrin-binding antibody-thrombin inhibitor chimeric molecules and their use as antithrombotics
INVENTOR(S): Haber, Edgar; Bode, Christoph; Runge, Marschall S.
PATENT ASSIGNEE(S): President and Fellows of Harvard College, USA; Emory University
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9425491	A1	19941110	WO 1994-US4881	19940503
W: CA, JP				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
US 5443827	A	19950822	US 1993-58699	19930503
CA 2161772	AA	19941110	CA 1994-2161772	19940503
EP 713496	A1	19960529	EP 1994-915992	19940503
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08509618	T2	19961015	JP 1994-524639	19940503

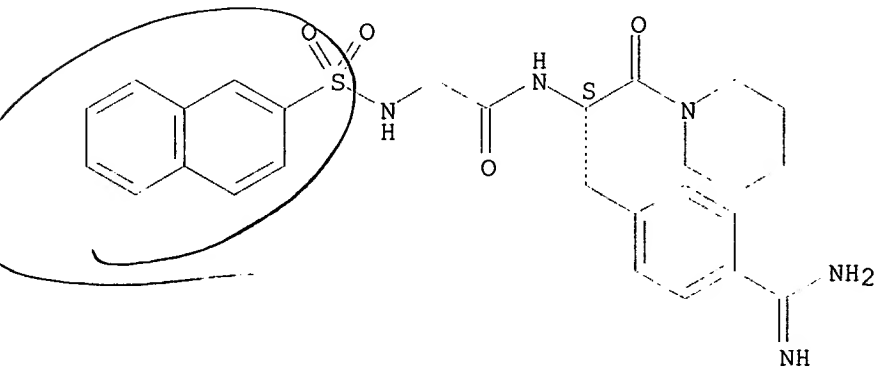
PRIORITY APPLN. INFO.: US 1993-58699 19930503
WO 1994-US4881 19940503

AB A chimeric mol. that contains a fibrin-binding portion of an antibody covalently linked to an inhibitor of thrombin, which mol. may be administered to inhibit thrombus formation and growth, is claimed. Anti-fibrin monoclonal IgG 59D8 or its Fab' fragment was chem. conjugated to hirudin. In tests of inhibition of thrombus growth in human plasma, the conjugate was 10-fold more potent that hirudin alone.
IT **9039-53-6D, Urokinase**, conjugates with anti-fibrin antibodies **86845-59-2D**, conjugates with anti-fibrin antibodies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fibrin-binding antibody-thrombin inhibitor chimeric mols. and their use as antithrombotics)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 86845-59-2 CAPLUS
CN Acetamide, N-[(1S)-1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L47 ANSWER 14 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1993:18375 CAPLUS
DOCUMENT NUMBER: 118:18375
TITLE: Inhibition of human mast cell tryptase by benzamidine derivatives
AUTHOR(S): Stuerzebecher, Joerg; Prasa, Dagmar; Sommerhoff, Christian P.
CORPORATE SOURCE: Inst. Pharmakol. Toxikol., Med. Akad. Erfurt, Erfurt, O-5010, Germany
SOURCE: Biol. Chem. Hoppe-Seyler (1992), 373(10), 1025-30
CODEN: BCHSEI; ISSN: 0177-3593
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Considerable circumstantial evidence has been provided by in vitro studies that tryptase (EC 3.4.21.59), a neutral serine proteinase stored in large amts. in mast cell granules, may play an important pathogenetic role in mast cell-dependent diseases. However, a definitive role has not yet been ascribed to this trypsin-like enzyme with restricted substrate specificity as natural or synthetic inhibitors of tryptase applicable for in vivo studies are not available so far. Here, structure-activity relationships for inhibition of tryptase by benzamidine derivs., compds. known to be potent inhibitors of various trypsin-like enzymes, were studied. Among the benzamidine derivs., 4-amidinophenylpyruvic acid exerts a striking inhibitory activity with a Ki of 0.71 .mu.mol/L. Several addnl. inhibitors of tryptase with Ki values in the micromolar range were found among bis-benzamidines. Derivs. of N.alpha.-arylsulfonyl-.omega.-amidinophenyl-.alpha.-aminoalkylcarboxylic acids are only weak inhibitors of tryptase, although members of this group are potent and selective inhibitors of several other trypsin-like enzymes. Comparison of the inhibition of tryptase and trypsin revealed that the affinities of the benzamidine derivs. to both proteinases are closely correlated (correlation coeff. $r = 0.702$; $n = 37$; $p < 0.001$). These results demonstrate that 4-amidinophenylpyruvic acid may be useful as a pharmacol.

tool for the investigation of the (patho)physiol. role of tryptase. In addn., benzamidine derivs. may be applicable to probe the active site topog. of tryptase isoenzymes.

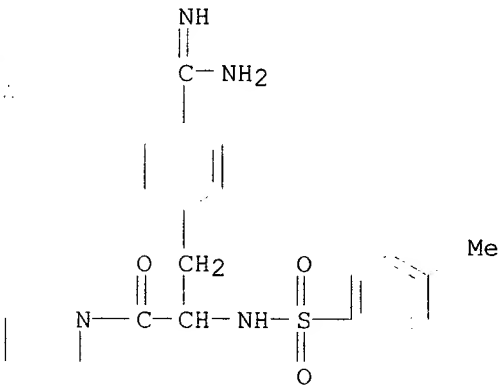
IT **9039-53-6, Urokinase**
RL: PROC (Process)
(inhibition of, by amidinophenylpyruvate, kinetics of)

RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

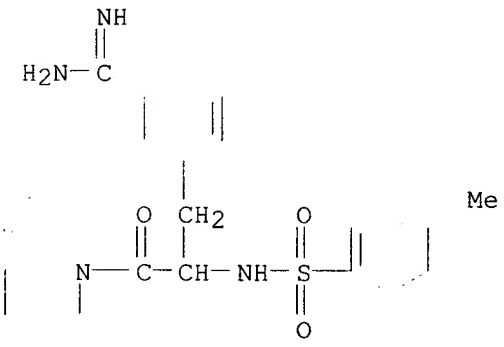
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

IT **73438-62-7 73438-63-8 73438-72-9**
RL: BIOL (Biological study)
(tryptase of human mast cell inhibition by, structure in relation to)

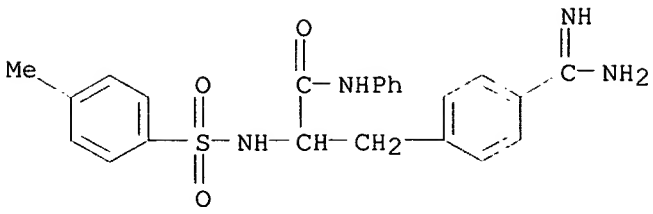
RN 73438-62-7 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



RN 73438-63-8 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



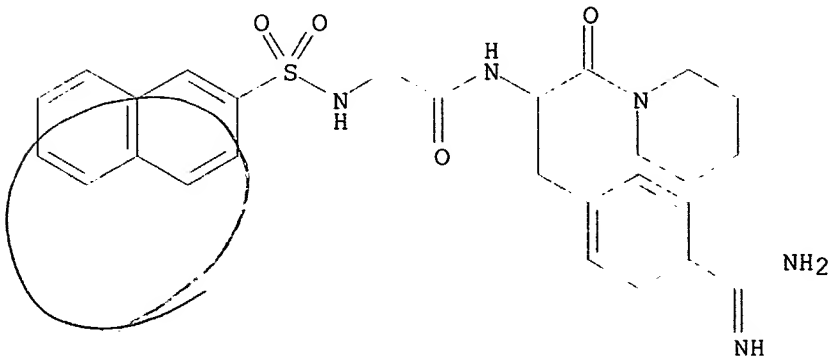
RN 73438-72-9 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]-N-phenyl- (9CI) (CA INDEX NAME)



L47 ANSWER 15 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1988:522248 CAPLUS
DOCUMENT NUMBER: 109:122248
TITLE: Inhibition of fibrinolytic enzymes by thrombin inhibitors
AUTHOR(S): Gilboa, Nisan; Villannueva, G. B.; Fenton, J. W., II
CORPORATE SOURCE: Wadsworth Cent. Lab. Res., New York State Dep. Health, Albany, NY, 12201, USA
SOURCE: Enzyme (1988), 40(2-3), 144-8
CODEN: ENZYBT; ISSN: 0013-9432
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The effect of 2 protein and 2 synthetic inhibitors of thrombin on human tissue plasminogen activator (tPA), urokinase, and plasmin was studied. Hirudin inhibited the amidolytic activity of plasmin but had no effect on tPA or urokinase. Antithrombin III inhibited plasmin and urokinase but had no effect on tPA. D-Phe-Pro-Arg-CH2Cl inhibited plasmin and tPA but had no effect on urokinase. Thrombstop inhibited all 3 fibrinolytic enzymes: plasmin, urokinase, and tPA. Thus, each thrombin inhibitor tested had different inhibitory effects on the fibrinolytic enzymes. These effects should be carefully considered when thrombin inhibitors are used as antithrombotic drugs.

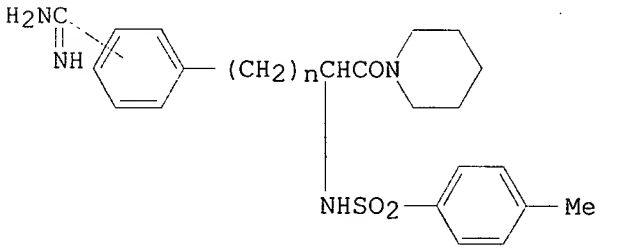
IT **117091-16-4**
RL: BIOL (Biological study)
(fibrinolytic enzymes of humans inhibition by)
RN 117091-16-4 CAPLUS
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



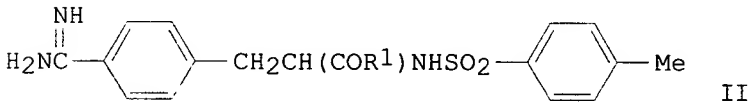
IT **9039-53-6, Urokinase**
RL: BIOL (Biological study)
(thrombin inhibitors inhibition of human)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

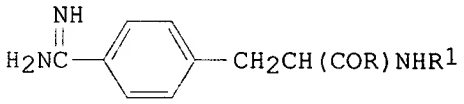
L47 ANSWER 16 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 1980:176396 CAPLUS
DOCUMENT NUMBER: 92:176396
TITLE: N-.alpha.-arylsulfonyl-.omega.-(4-amidinophenyl)-.alpha.-aminoalkylcarboxylic acid amides - novel selective inhibitors of thrombin
AUTHOR(S): Markwardt, F.; Wagner, G.; Stuerzebecher, J.; Walsmann, P.
CORPORATE SOURCE: Inst. Pharmacol. Toxicol., Med. Acad. Erfurt, Erfurt, DDR-506, Ger. Dem. Rep.
SOURCE: Thromb. Res. (1980), 17(3-4), 425-31
CODEN: THBRAA; ISSN: 0049-3848
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I



II



III

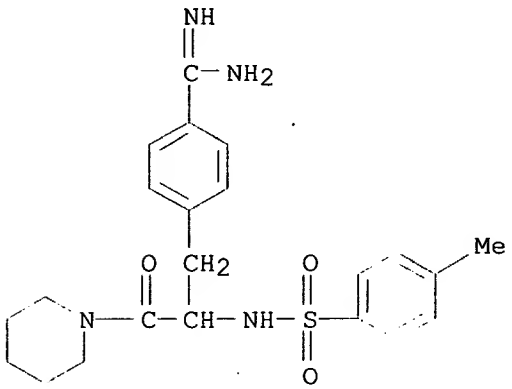
AB New derivs. of benzamidine (N-.alpha.-arylsulfonyl-.omega.-amidinophenyl-.alpha.-aminoalkylcarboxylic acid amides) are potent inhibitors of thrombin. The cyclic amides of N-.alpha.-substituted 4-amidinophenylalanine and 2-amino-5-(4-amidinophenyl)valeric acid inhibited thrombin selectively. The m-derivs. inhibited trypsin, plasmin, kallikrein, and urokinase in addn. to their antithrombin action. Examples of these derivs. include N-.alpha.-tosylamidinophenyl-.alpha.-aminocarboxylic acid piperidides I (n = 0 -3), N-.alpha.-tosyl(4-amidinophenyl)alanine amides II (R1 = NHPh, NHCH2Ph, piperidino, etc.), N-.alpha.-substituted 4-amidinophenylalanine amides III (R = piperidino, morpholino, etc. and R1 = arylsulfonyl group), and N-.alpha.-tosylamidinophenylalanine piperidides.

IT **9039-53-6**
RL: PROC (Process)
(inhibition of, by tosylamidinophenylalanine piperidides, kinetics of)
RN 9039-53-6 CAPLUS
CN Kinase (enzyme-activating), uro- (9CI) (CA INDEX NAME)

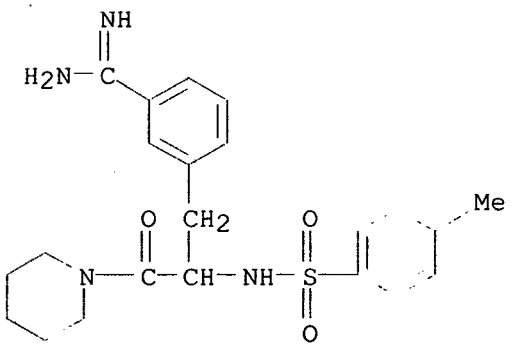
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **73438-62-7 73438-63-8 73438-67-2**
73438-68-3 73438-69-4 73438-70-7

73438-71-8 73438-72-9 73438-73-0
73438-74-1 73438-75-2 73438-76-3
73438-77-4 73438-78-5D, derivs. **73438-80-9**
73438-81-0 73438-82-1 73438-83-2
73438-84-3 73438-85-4
RL: BIOL (Biological study)
(thrombin inhibition by, kinetics of)

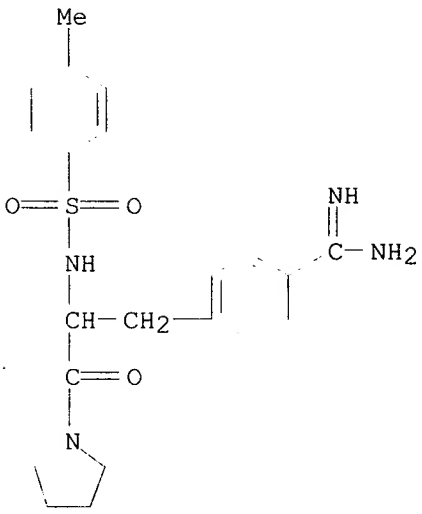
RN 73438-62-7 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



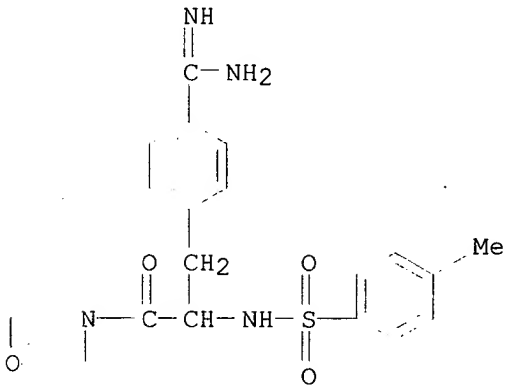
RN 73438-63-8 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



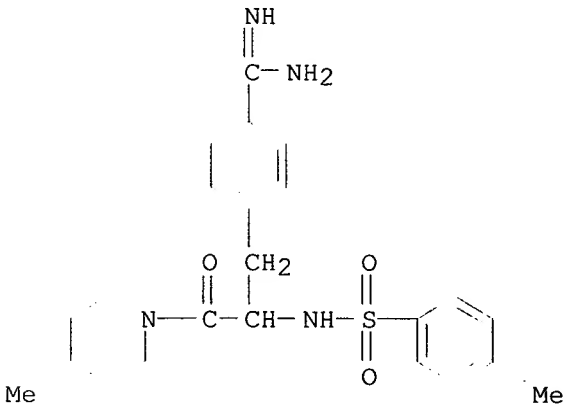
RN 73438-67-2 CAPLUS
CN Pyrrolidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



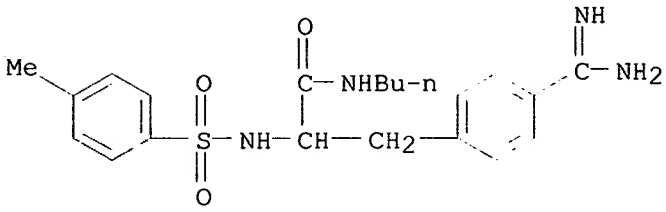
RN 73438-68-3 CAPLUS
CN Morpholine, 4-[3-[4-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



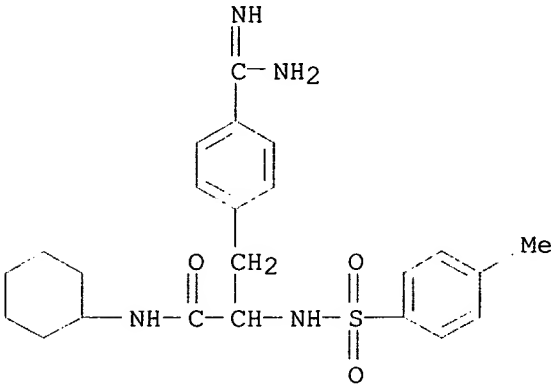
RN 73438-69-4 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[[(4-methylphenyl)sulfonyl]amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)



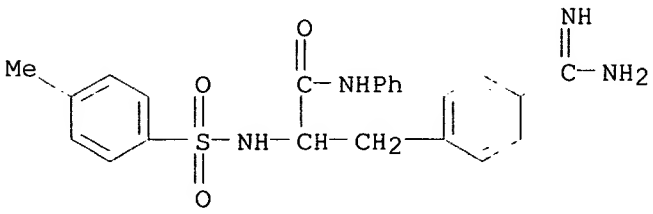
RN 73438-70-7 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-N-butyl-.alpha.-[[(4-methylphenyl)sulfonyl]amino]- (9CI) (CA INDEX NAME)



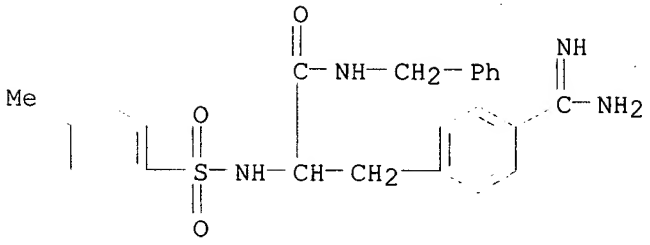
RN 73438-71-8 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-N-cyclohexyl-.alpha.-[[(4-methylphenyl)sulfonyl]amino]- (9CI) (CA INDEX NAME)



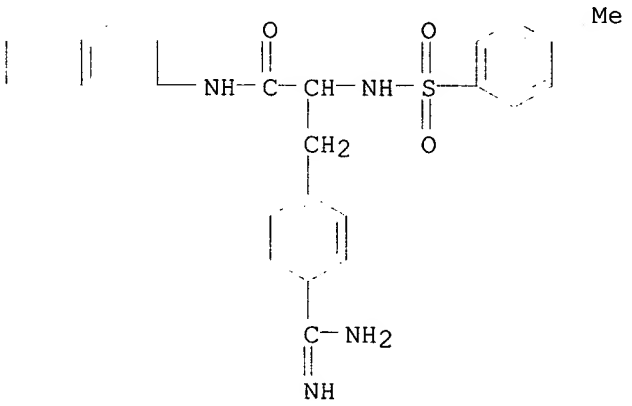
RN 73438-72-9 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]-N-phenyl- (9CI) (CA INDEX NAME)



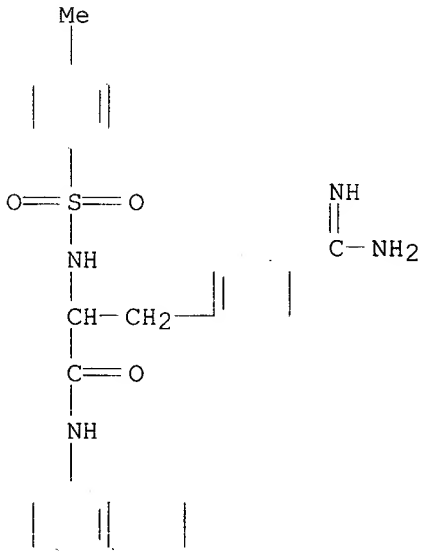
RN 73438-73-0 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



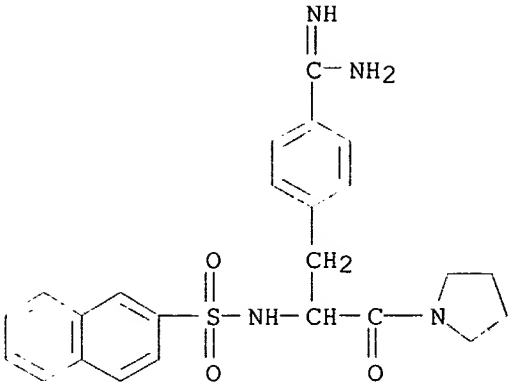
RN 73438-74-1 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]-N-2-naphthalenyl- (9CI) (CA INDEX NAME)



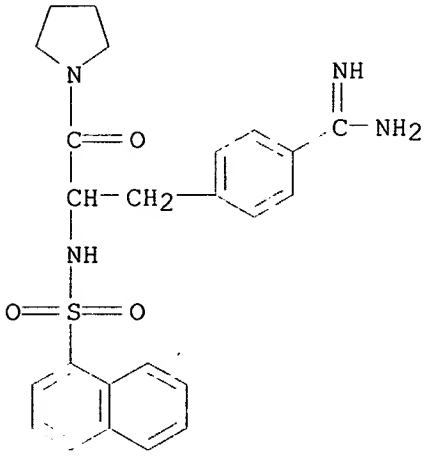
RN 73438-75-2 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]-N-1-naphthalenyl- (9CI) (CA INDEX NAME)



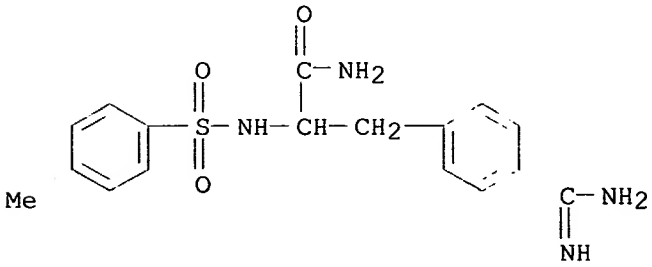
RN 73438-76-3 CAPLUS
CN Pyrrolidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



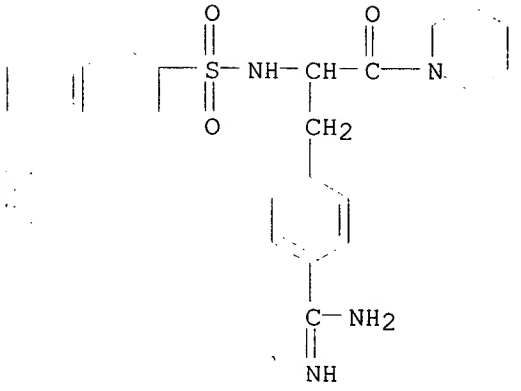
RN 73438-77-4 CAPLUS
CN Pyrrolidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(1-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



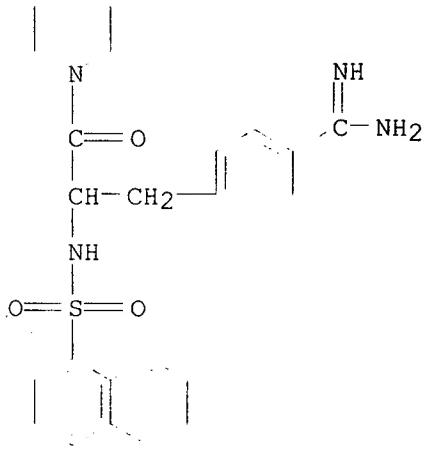
RN 73438-78-5 CAPLUS
CN Benzenepropanamide, 4-(aminoiminomethyl)-.alpha.-[[(4-methylphenyl)sulfonyl]amino]- (9CI) (CA INDEX NAME)



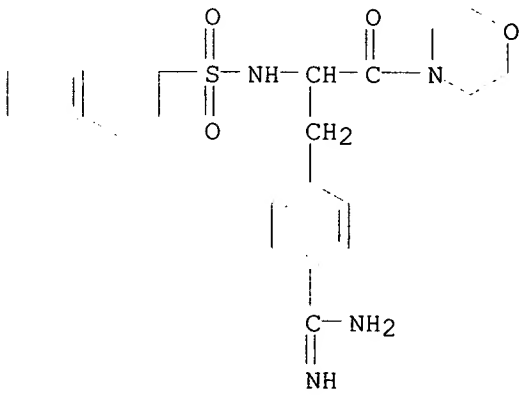
RN 73438-80-9 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



RN 73438-81-0 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(1-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

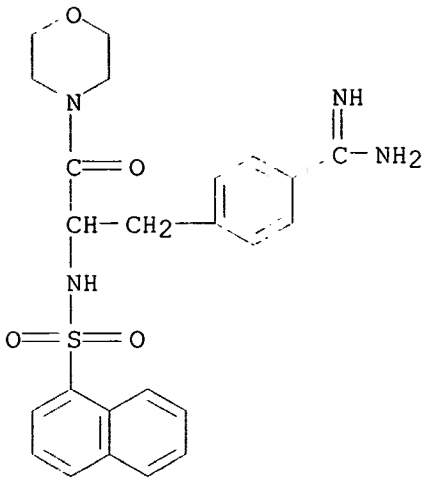


RN 73438-82-1 CAPLUS
CN Morpholine, 4-[3-[4-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)

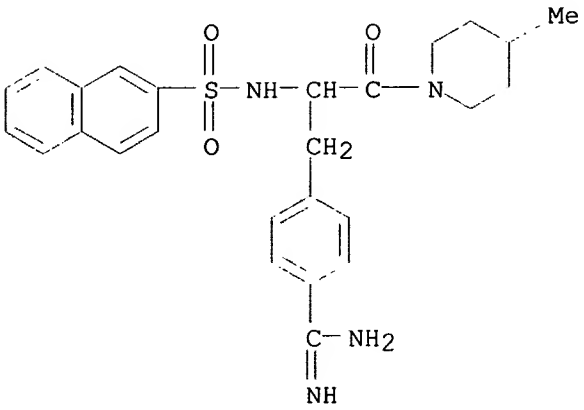


RN 73438-83-2 CAPLUS

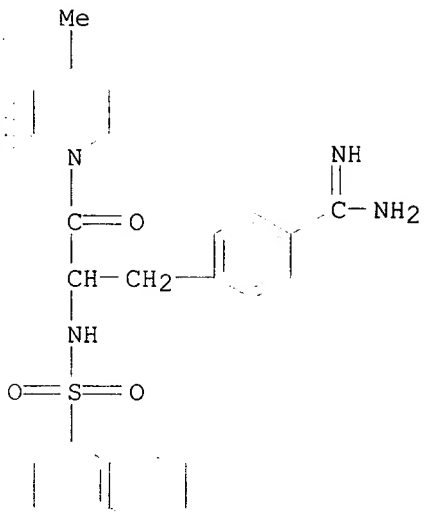
CN Morpholine, 4-[3-[4-(aminoiminomethyl)phenyl]-2-[(1-naphthalenylsulfonyl)amino]-1-oxopropyl]- (9CI) (CA INDEX NAME)



RN 73438-84-3 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)



RN 73438-85-4 CAPLUS
CN Piperidine, 1-[3-[4-(aminoiminomethyl)phenyl]-2-[(1-naphthalenylsulfonyl)amino]-1-oxopropyl]-4-methyl- (9CI) (CA INDEX NAME)



L47 ANSWER 17 OF 23 USPATFULL

ACCESSION NUMBER:	2002:27445 USPATFULL
TITLE:	Flavopiridol drug combinations and methods with reduced side effects
INVENTOR(S):	Ratain, Mark J., Chicago, IL, UNITED STATES Innocenti, Federico, Chicago, IL, UNITED STATES Iyer, Lalitha, Chicago, IL, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002016293	A1	20020207
APPLICATION INFO.:	US 2001-835082	A1	20010412 (9)

RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 2000-553829, filed on 21 Apr 2000, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Gina N. Shishima, Fulbright & Jaworski L.L.P., Suite 2400, 600 Congress Avenue, Austin, TX, 78701
NUMBER OF CLAIMS:	99
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	7 Drawing Page(s)
LINE COUNT:	5370

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention provides methods, formulations and kits to reduce the toxicity of flavopiridol and analogs thereof. Disclosed are therapeutics and treatment methods employing such drugs in combination with agents that increase conjugative enzyme activity or glucuronosyltransferase activity, and agents that decrease biliary transport protein activity, such as cyclosporine A, the resultant effects of which are to decrease the significant side effects previously associated with treatment using these drugs. The invention also characterizes specific isoforms of glucuronyltransferase enzymes involved in glucuronidation of flavopiridols and their analogs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

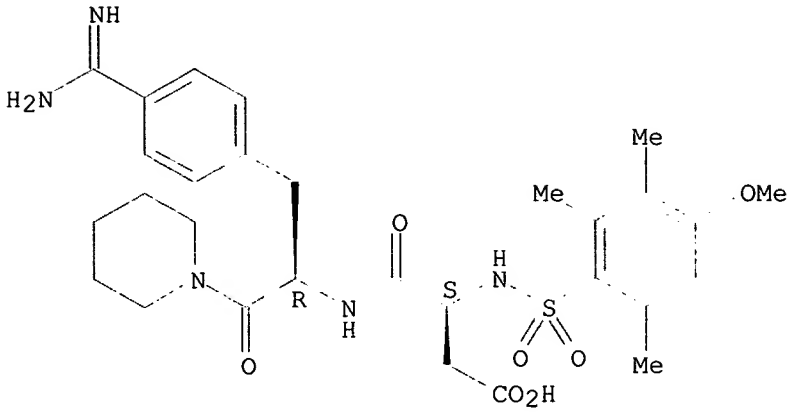
IT **146663-95-8**, CRC 220
(flavopiridol drug combinations with glucuronosyltransferase activity enhancer and methods with reduced side effects by enhancing its metab.)

RN 146663-95-8 USPATFULL

CN Butanoic acid, 4-[[(1R)-1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-

piperidinyl)ethyl]amino]-3-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-4-oxo-, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



L47 ANSWER 18 OF 23 USPATFULL

ACCESSION NUMBER:	1999:146598 USPATFULL
TITLE:	Selective thrombin inhibitors
INVENTOR(S):	Oh, Yeong Soo, Daejeon, Korea, Republic of Kim, Sang Soo, Daejeon, Korea, Republic of Hwang, Sang Yeul, Daejeon, Korea, Republic of Yun, Mi Kyung, Daejeon, Korea, Republic of Hwang, Seong Ryul, Daejeon, Korea, Republic of Hong, Seong Won, Daejeon, Korea, Republic of Lee, Yong Hee, Daejeon, Korea, Republic of Jeong, Yi Na, Daejeon, Korea, Republic of Lee, Koo, Daejeon, Korea, Republic of Shin, You Seung, Daejeon, Korea, Republic of
PATENT ASSIGNEE(S):	LG Chemical Ltd., Korea, Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5985899		19991116
APPLICATION INFO.:	US 1997-967661		19971110 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-586208, filed on 16 Jan 1996, now patented, Pat. No. US 5747535		

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1995-10383	19950428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Raymond, Richard L.
LEGAL REPRESENTATIVE:	Hunton & Williams
NUMBER OF CLAIMS:	5
EXEMPLARY CLAIM:	1
LINE COUNT:	2075

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel selective thrombin inhibitor having the following formula (I), which is also effective by oral administration: ##STR1## in which R.sup.1 represents acetyl substituted with aryl or aryloxy, or represents sulfonyl substituted with substituted or unsubstituted aryl or N-containing heterocyclic group,

X represents a group of formula ##STR2## R.sup.2 and R.sup.3 independently of one another represent hydrogen; cycloalkyl substituted or unsubstituted with carboxyl or alkoxycarbonyl; arylalkyloxy; hydroxy; or lower alkyl substituted or unsubstituted with carboxyl, alkoxycarbonyl or hydroxy, or

R.sup.2 and R.sup.3 together with nitrogen atom to which they are attached can form a piperidine group substituted with carboxyl or alkoxycarbonyl,

R.sup.4 represents hydrogen, lower alkyl or lower alkoxy,

R.sup.5 represents alkanesulfonyl; alkoxycarbonyl; alkylcarbonyl; formyl; lower alkyl; aryl substituted or unsubstituted with alkoxy or haloalkyl; or hydroxy-substituted lower alkyl, and

R.sup.6 and R.sup.7 independently of one another represent hydrogen, lower alkyl or amino,

and to a process for preparation thereof and a pharmaceutical composition for thrombin inhibition which comprises the compound of formula (I) as an active ingredient.

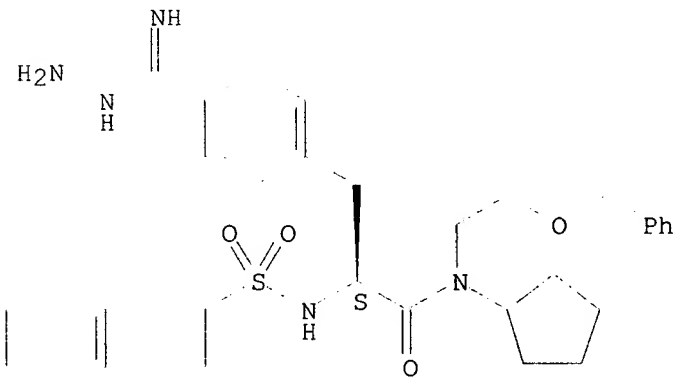
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT **184770-84-1P 184771-06-0P 184771-08-2P**
184771-09-3P 184771-10-6P 184771-12-8P
184771-14-0P 184771-16-2P 184771-18-4P
184771-20-8P 184771-22-0P 184771-24-2P
184771-26-4P 184771-29-7P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)

RN 184770-84-1 USPATFULL

CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl[2-(phenylmethoxy)ethyl]amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

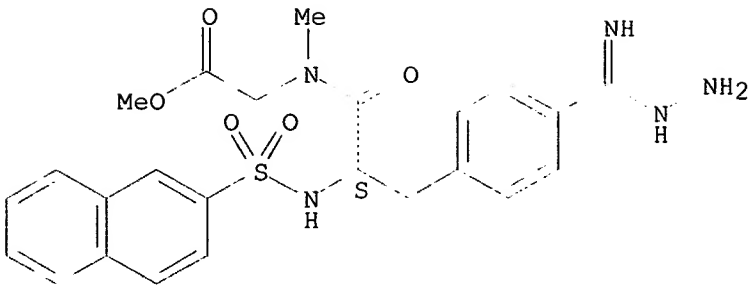
Absolute stereochemistry.



RN 184771-06-0 USPATFULL

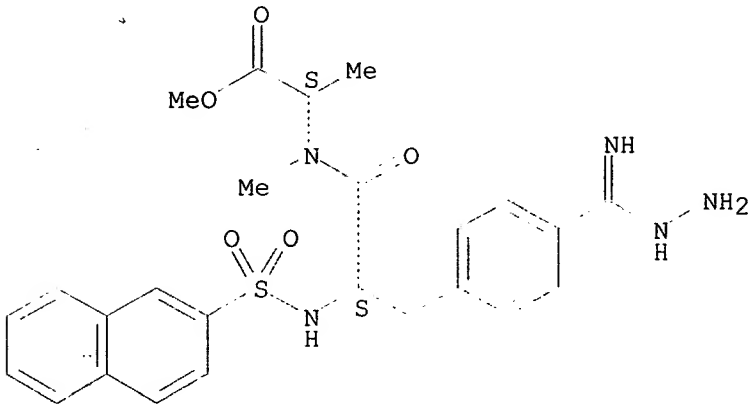
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



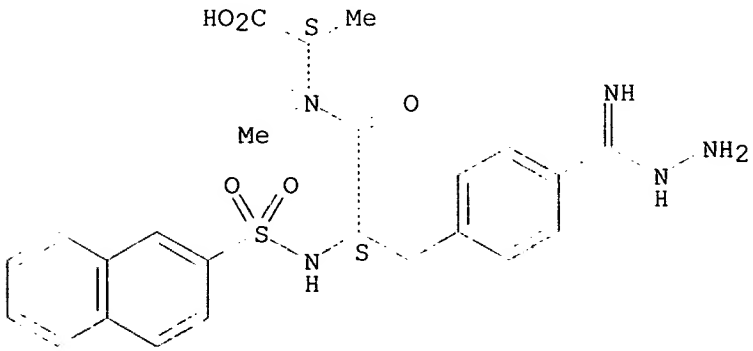
RN 184771-08-2 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



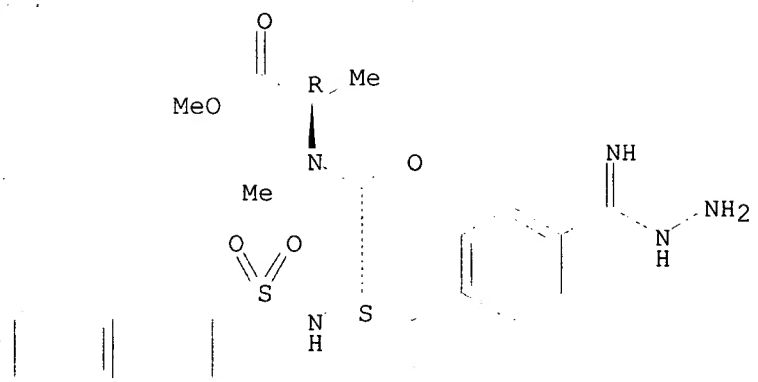
RN 184771-09-3 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



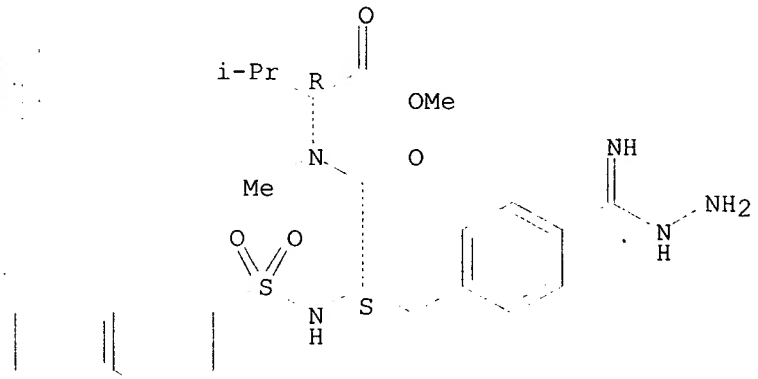
RN 184771-10-6 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



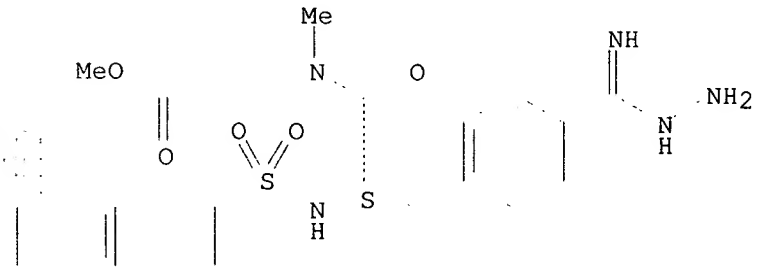
RN 184771-12-8 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



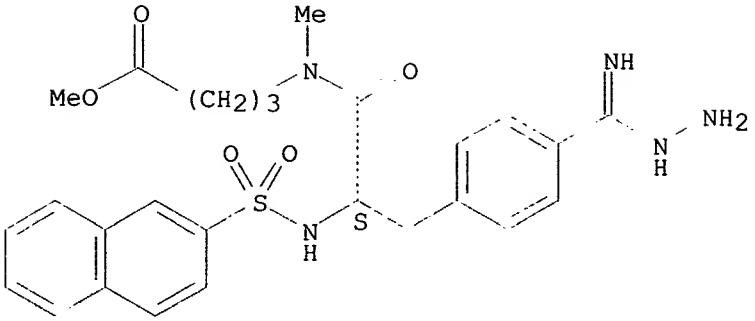
RN 184771-14-0 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



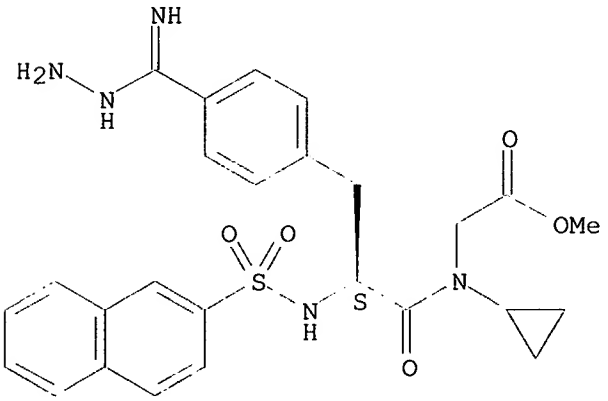
RN 184771-16-2 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



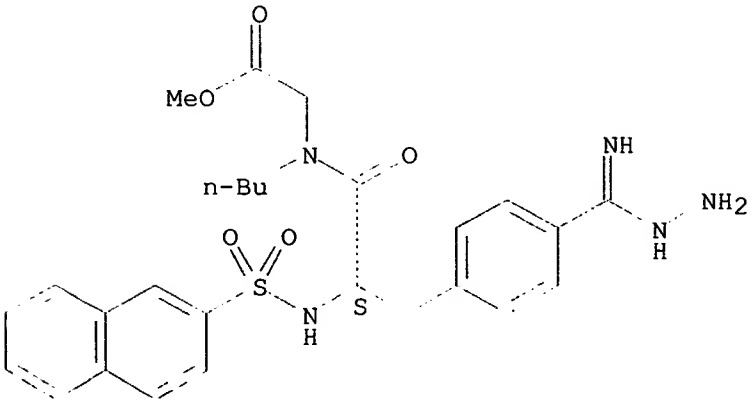
RN 184771-18-4 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



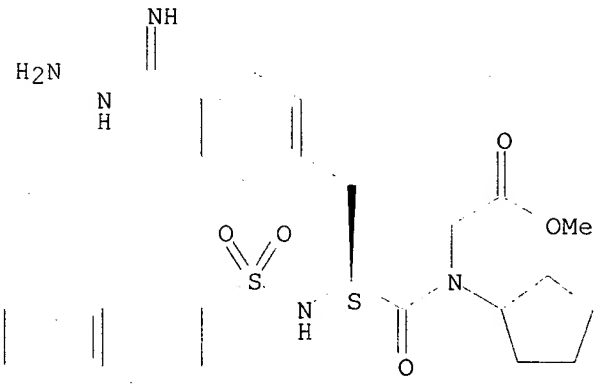
RN 184771-20-8 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



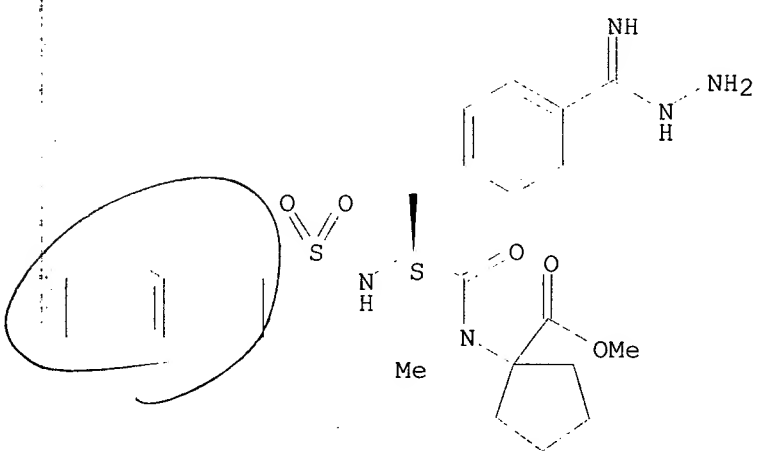
RN 184771-22-0 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



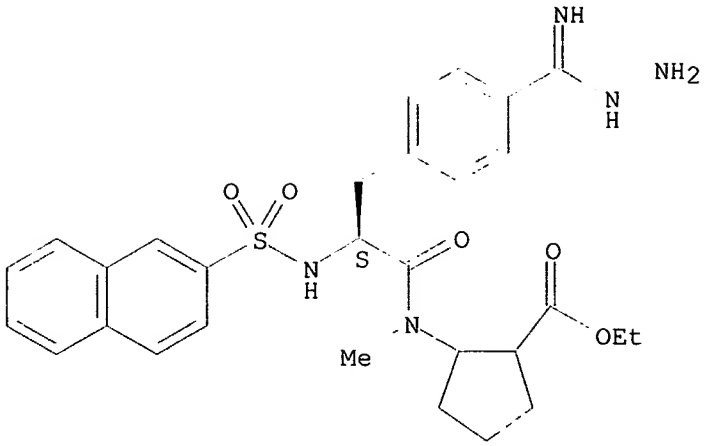
RN 184771-24-2 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



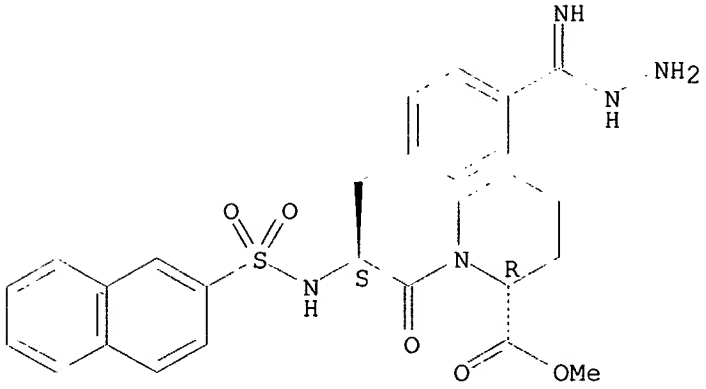
RN 184771-26-4 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, ethyl ester, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



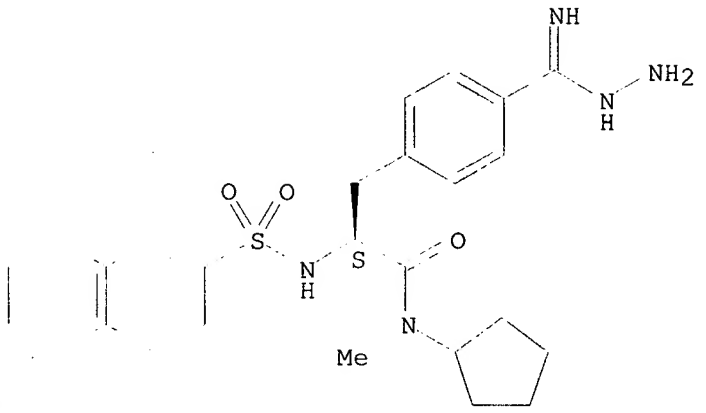
RN 184771-29-7 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, methyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



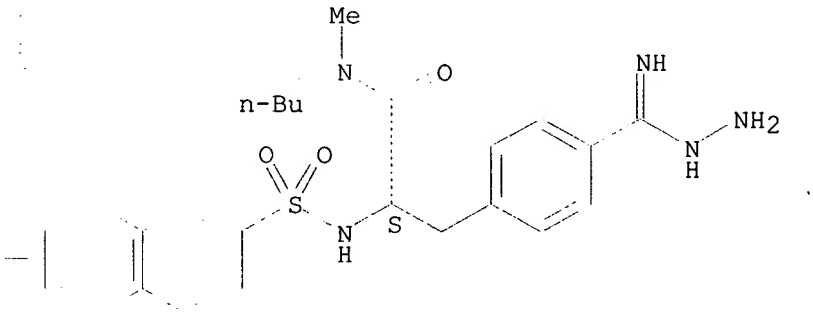
IT **184770-78-3P 184770-80-7P 184770-82-9P**
184770-85-2P 184770-87-4P 184770-88-5P
184770-90-9P 184770-91-0P 184770-92-1P
184770-93-2P 184770-94-3P 184770-95-4P
184770-96-5P 184770-97-6P 184770-99-8P
184771-00-4P 184771-01-5P 184771-02-6P
184771-03-7P 184771-07-1P 184771-11-7P
184771-13-9P 184771-15-1P 184771-17-3P
184771-19-5P 184771-21-9P 184771-23-1P
184771-25-3P 184771-27-5P 184771-28-6P
184771-30-0P 184771-31-1P 184771-32-2P
184771-33-3P 184771-34-4P 184771-35-5P
184771-36-6P 184771-37-7P 184771-38-8P
184771-39-9P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)
RN 184770-78-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



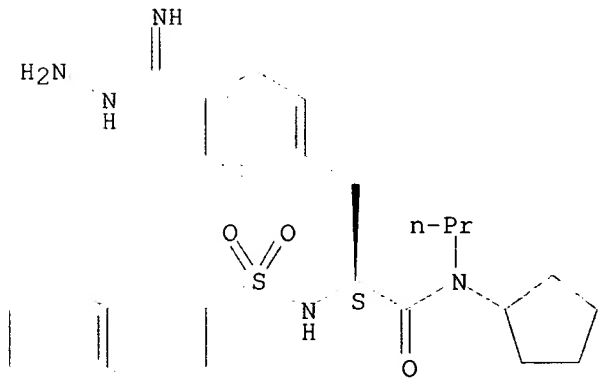
RN 184770-80-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184770-82-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylpropylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

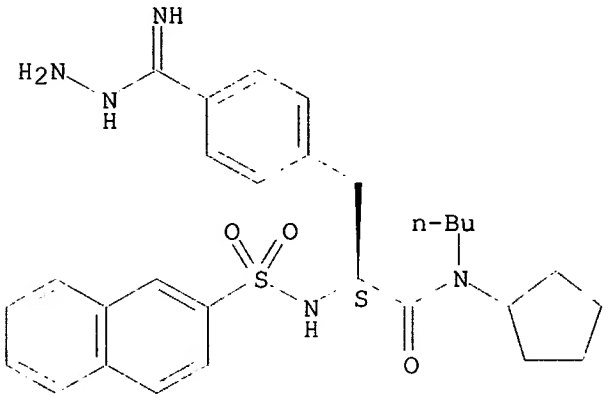
Absolute stereochemistry.



RN 184770-85-2 USPATFULL

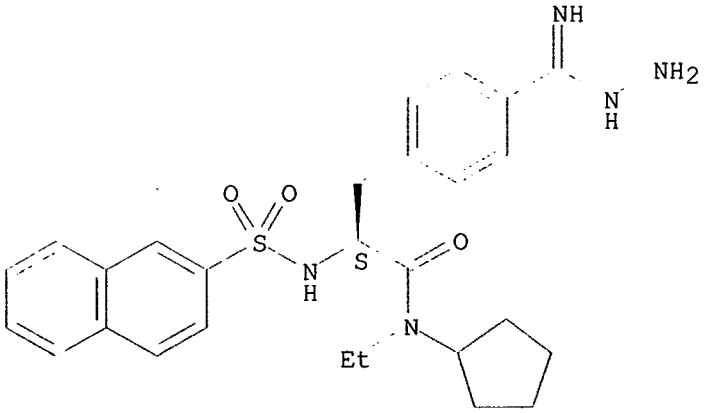
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylcyclopentylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



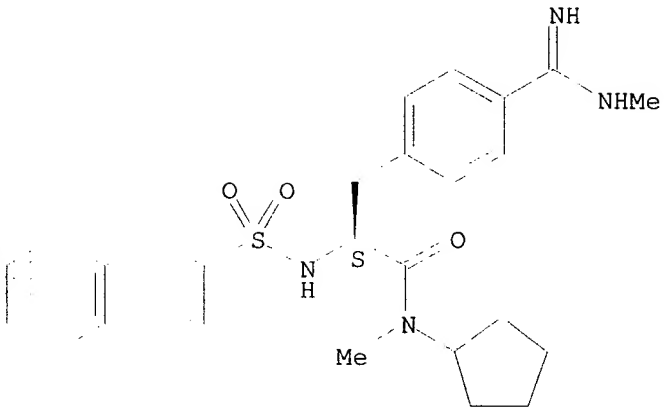
RN 184770-87-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



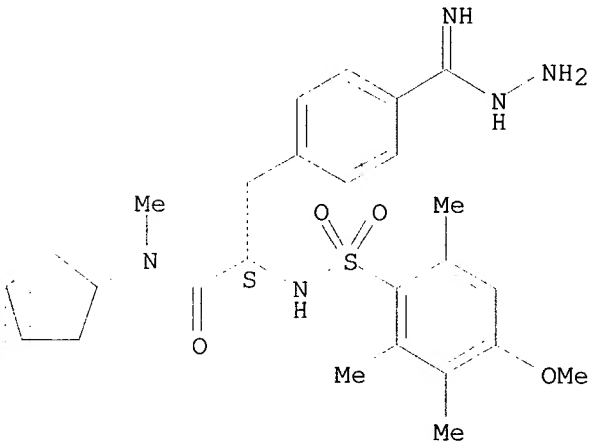
RN 184770-88-5 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-N-methyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



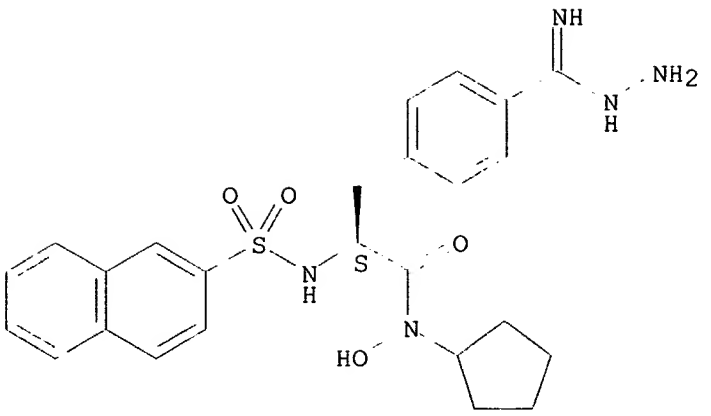
RN 184770-90-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



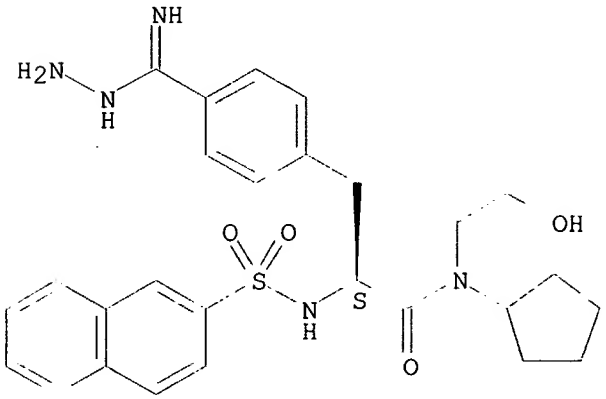
RN 184770-91-0 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylhydroxyamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



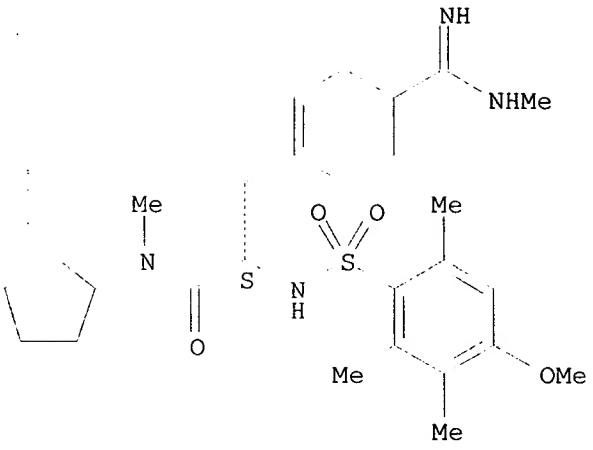
RN 184770-92-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl(2-hydroxyethyl)amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



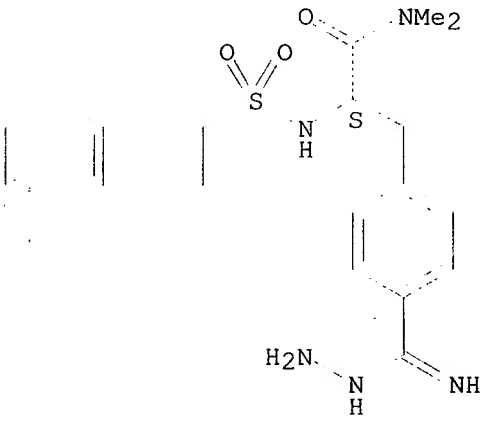
RN 184770-93-2 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-.alpha.-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



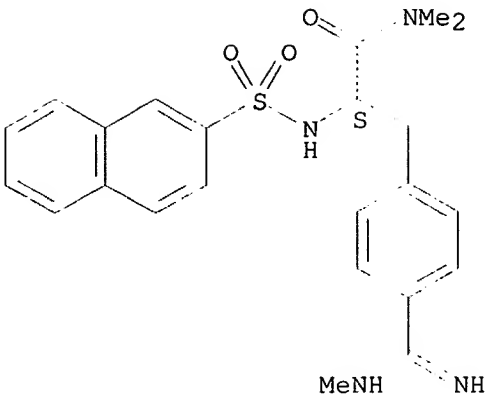
RN 184770-94-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(dimethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



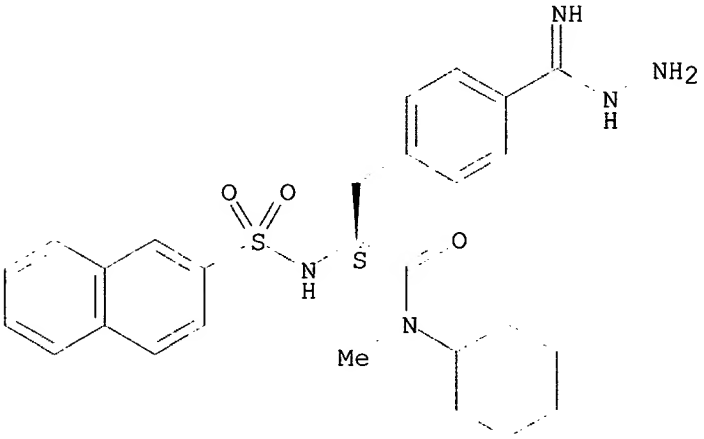
RN 184770-95-4 USPATFULL
CN Benzenepropanamide, 4-[imino(methylamino)methyl]-N,N-dimethyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



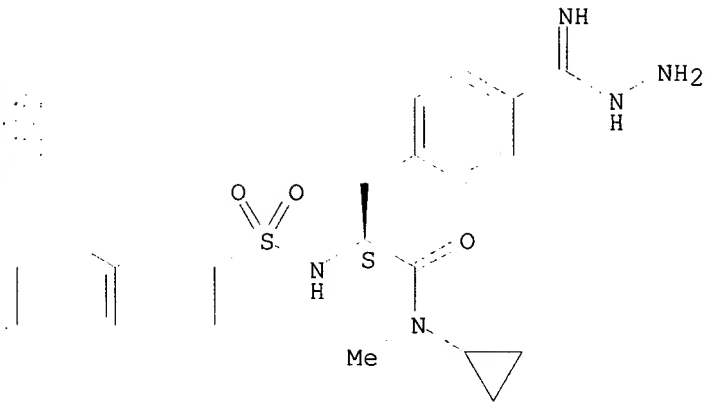
RN 184770-96-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclohexylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



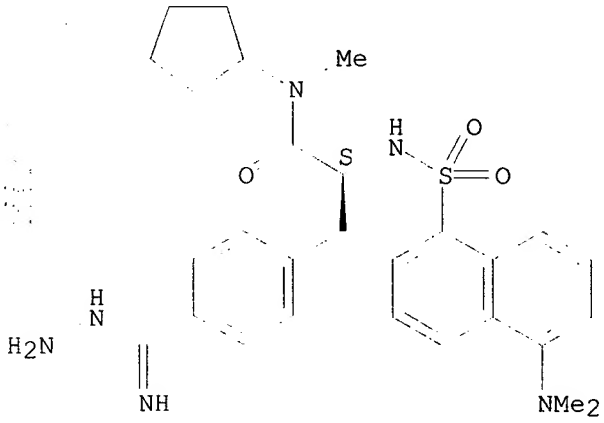
RN 184770-97-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopropylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



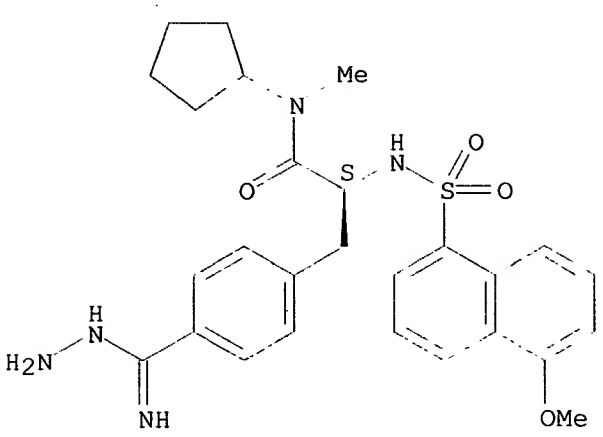
RN 184770-99-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



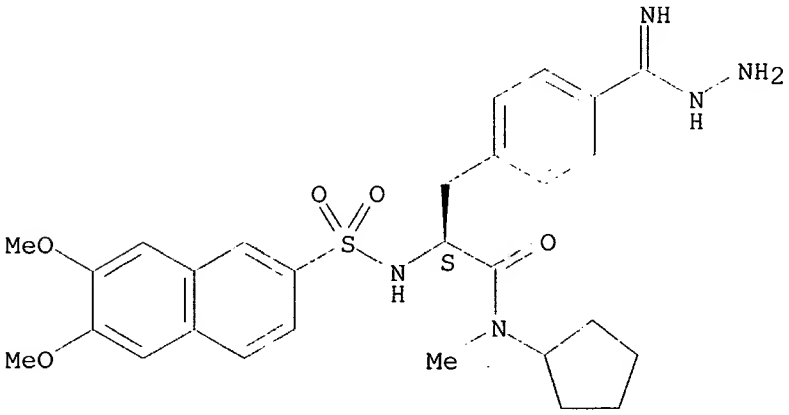
RN 184771-00-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(5-methoxy-1-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



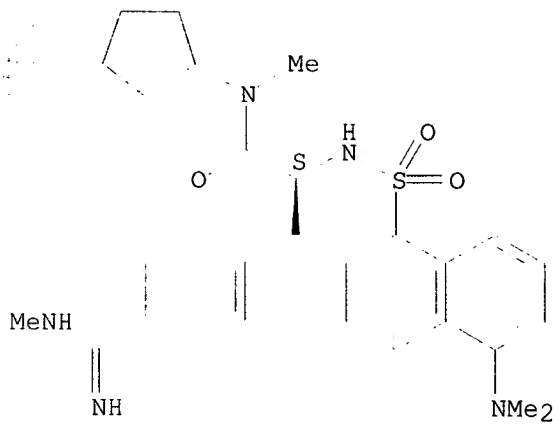
RN 184771-01-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(6,7-dimethoxy-2-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



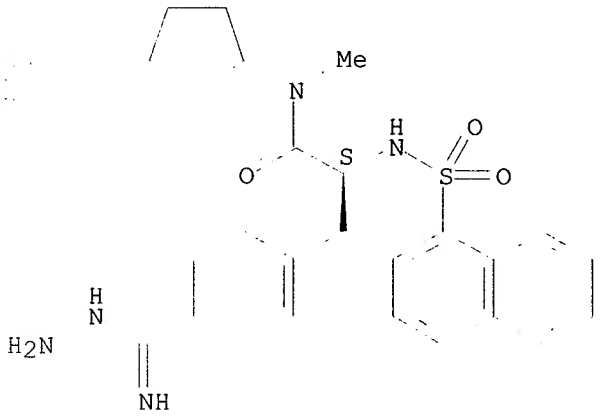
RN 184771-02-6 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-.alpha.-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-4-[imino(methylamino)methyl]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



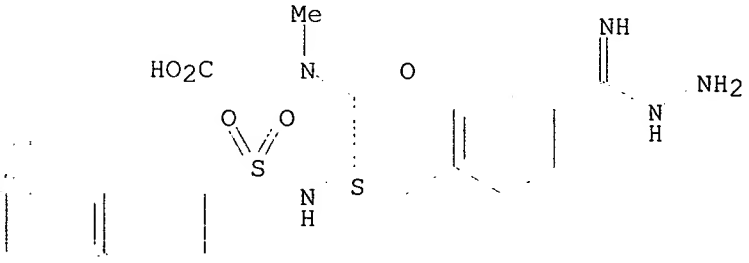
RN 184771-03-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(1-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



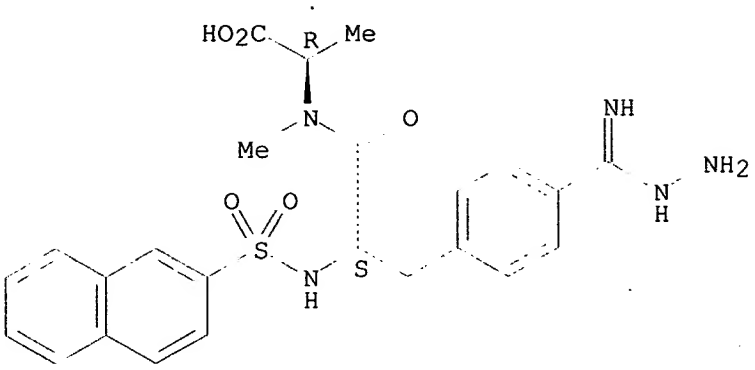
RN 184771-07-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



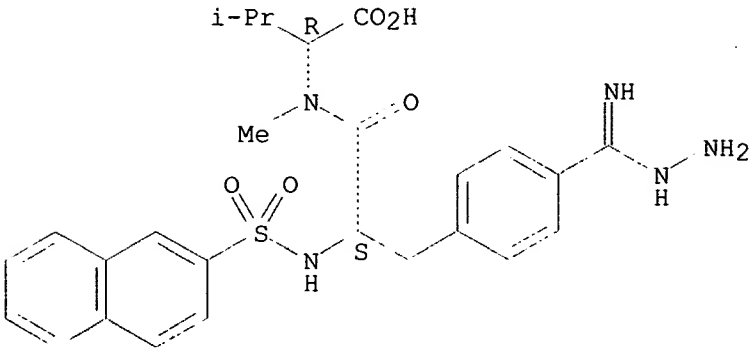
RN 184771-11-7 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



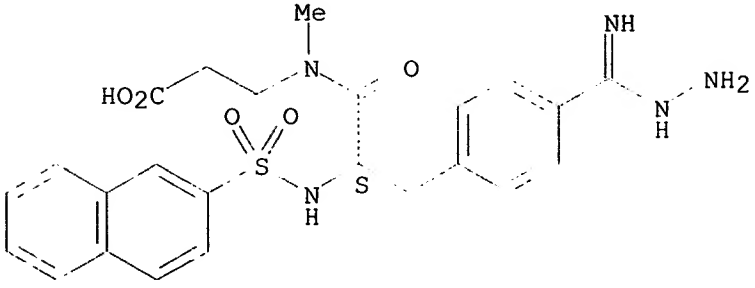
RN 184771-13-9 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



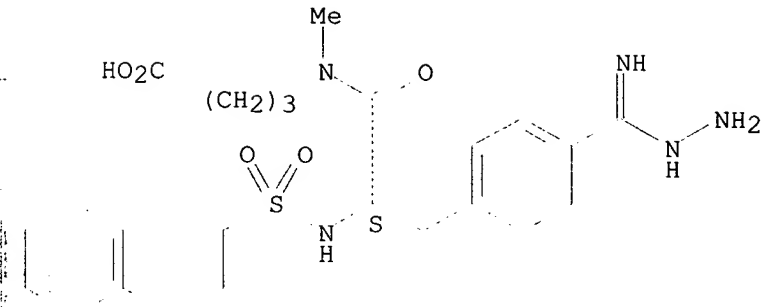
RN 184771-15-1 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



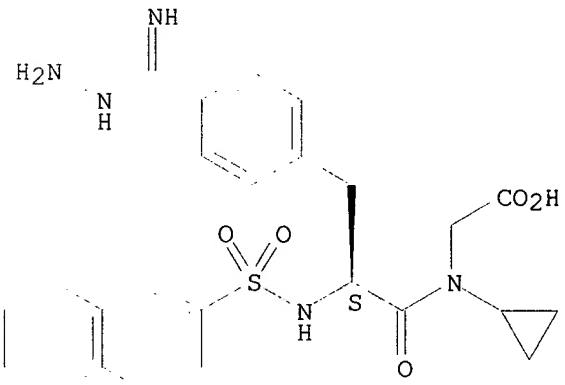
RN 184771-17-3 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



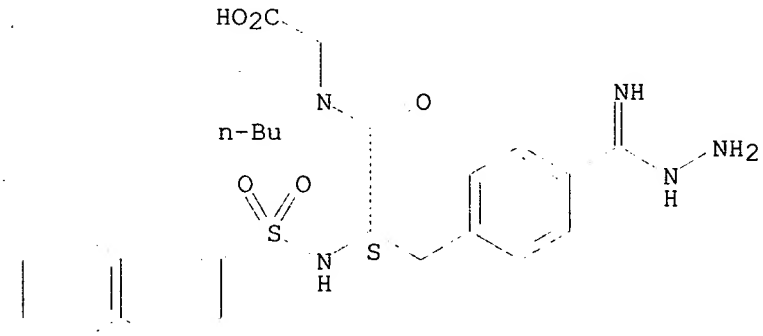
RN 184771-19-5 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



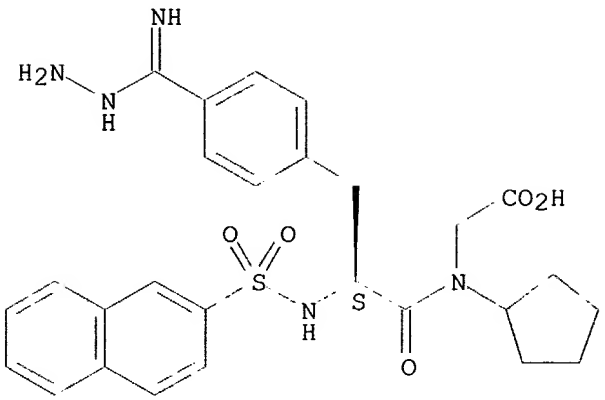
RN 184771-21-9 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



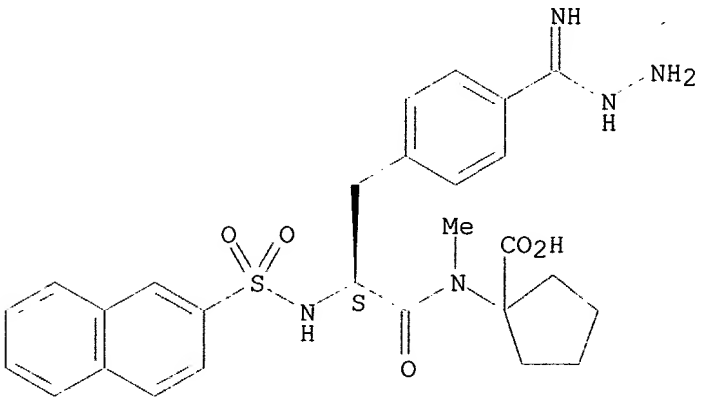
RN 184771-23-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



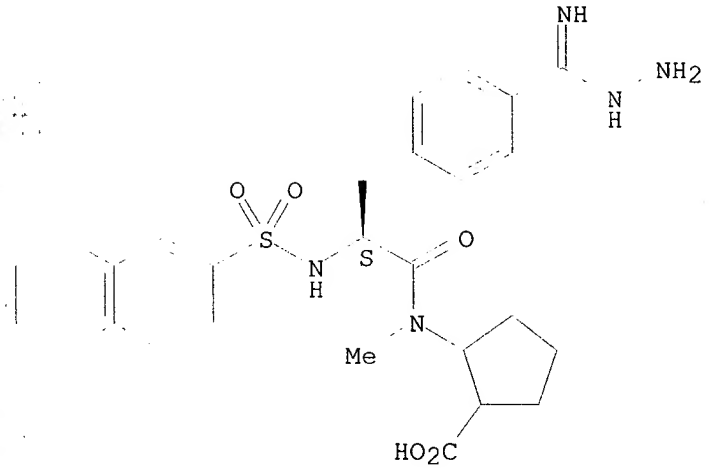
RN 184771-25-3 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



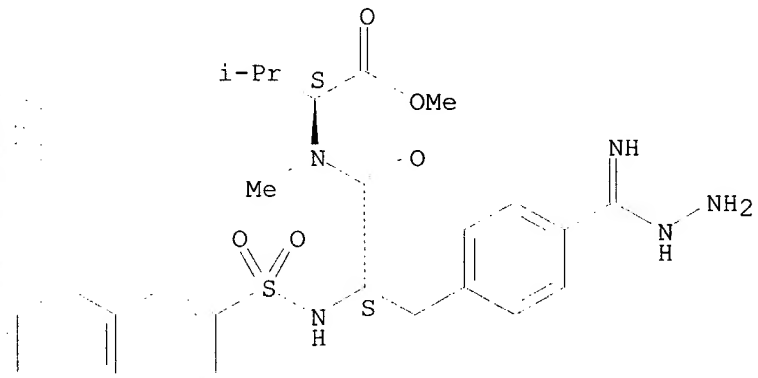
RN 184771-27-5 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



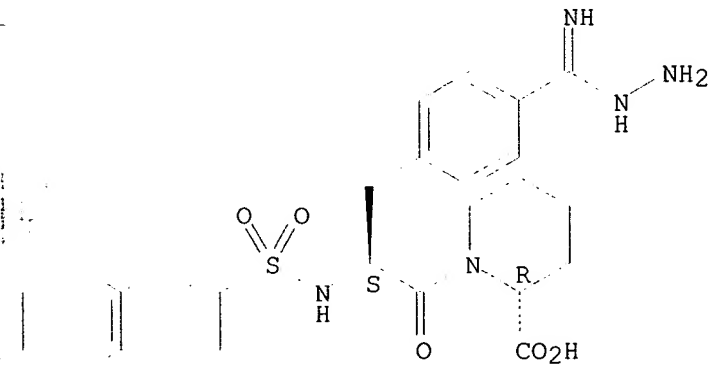
RN 184771-28-6 USPATFULL
CN L-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



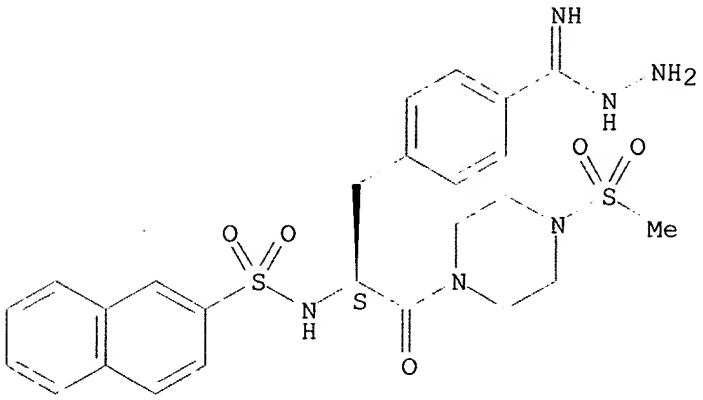
RN 184771-30-0 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



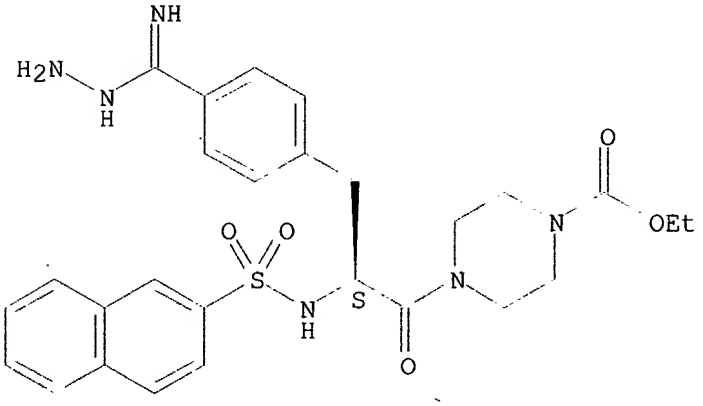
RN 184771-31-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(methylsulfonyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



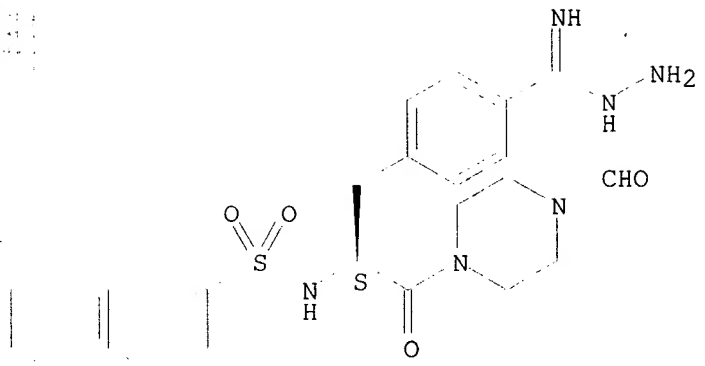
RN 184771-32-2 USPATFULL
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



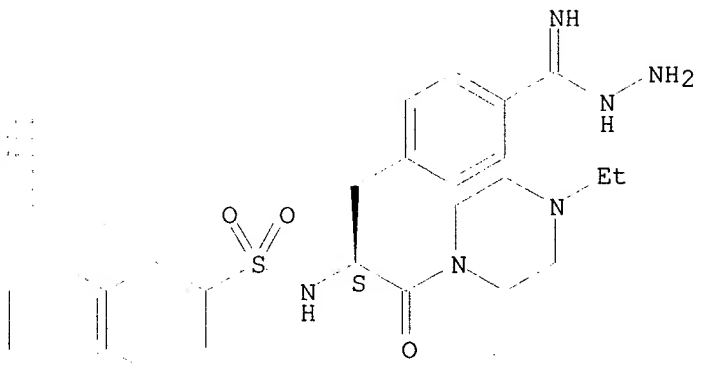
RN 184771-33-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-formyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



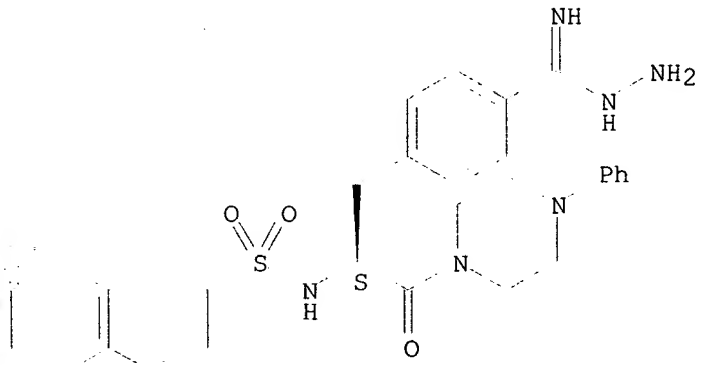
RN 184771-34-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-ethyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



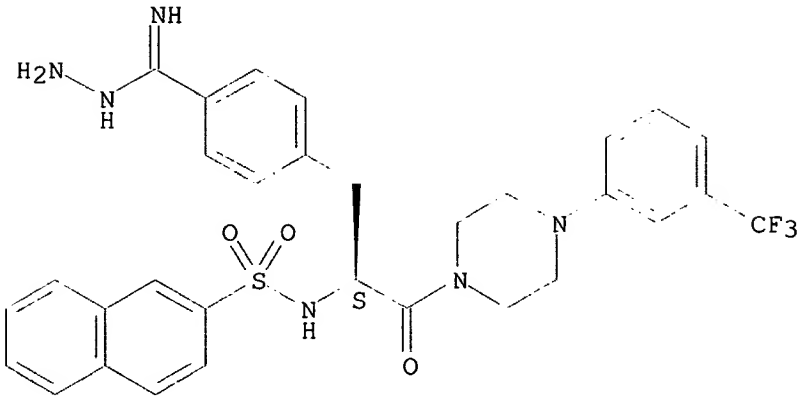
RN 184771-35-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-(4-phenyl-1-piperazinyl)propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



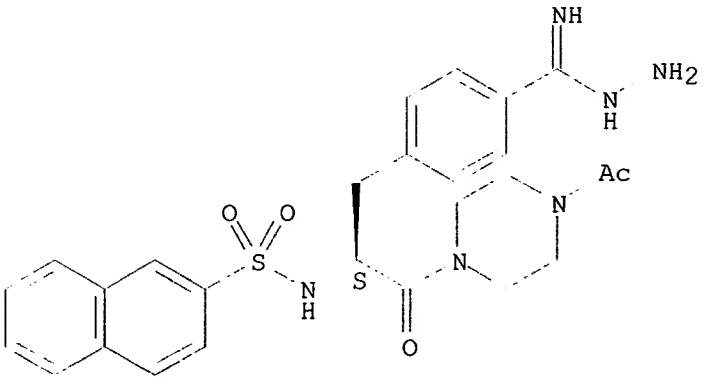
RN 184771-36-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



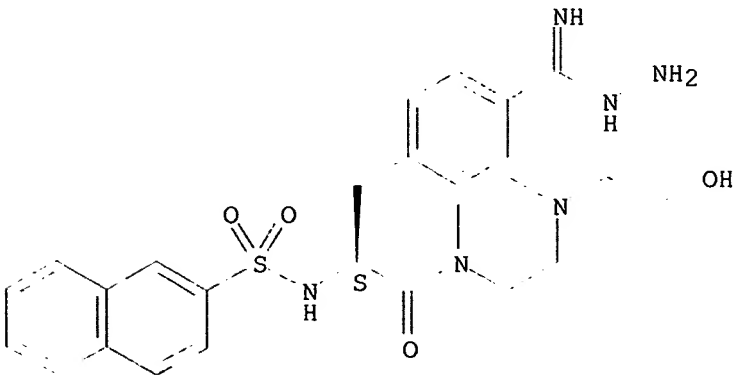
RN 184771-37-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-acetyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



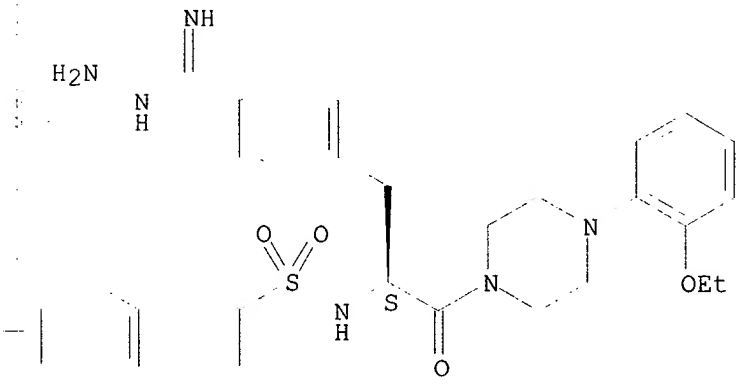
RN 184771-38-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-hydroxyethyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184771-39-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-ethoxyphenyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L47 ANSWER 19 OF 23 USPATFULL

ACCESSION NUMBER:	1999:137263 USPATFULL
TITLE:	Selective thrombin inhibitors
INVENTOR(S):	Oh, Yeong Soo, Daejeon, Korea, Republic of Kim, Sang Soo, Daejeon, Korea, Republic of Hwang, Sang Yeul, Daejeon, Korea, Republic of Yun, Mi Kyung, Daejeon, Korea, Republic of Hwang, Seong Ryul, Daejeon, Korea, Republic of Hong, Seong Won, Daejeon, Korea, Republic of Lee, Yong Hee, Daejeon, Korea, Republic of Jeong, Yi Na, Daejeon, Korea, Republic of Lee, Koo, Daejeon, Korea, Republic of Shin, You Seung, Daejeon, Korea, Republic of
PATENT ASSIGNEE(S):	LG Chemical Ltd., Korea, Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5977114		19991102
APPLICATION INFO.:	US 1997-967018		19971110 (8)
RELATED APPLN. INFO.:	Division of Ser. No. US 1996-586208, filed on 16 Jan 1996, now patented, Pat. No. US 5747535		

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1995-10383	19950428

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Raymond, Richard L.
LEGAL REPRESENTATIVE:	Hunton & Williams
NUMBER OF CLAIMS:	5
EXEMPLARY CLAIM:	1
LINE COUNT:	2084

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a novel selective thrombin inhibitor having the following formula (I), which is also effective by oral administration: ##STR1## in which R.sup.1 represents acetyl substituted with aryl or aryloxy, or represents sulfonyl substituted with substituted or unsubstituted aryl or N-containing heterocyclic group,

x represents a group of formula ##STR2## R.sup.2 and R.sup.3 independently of one another represent hydrogen; cycloalkyl substituted or unsubstituted with carboxyl or alkoxycarbonyl; arylalkyloxy; hydroxy; or lower alkyl substituted or unsubstituted with carboxyl, alkoxycarbonyl or hydroxy, or

R.sup.2 and R.sup.3 together with nitrogen atom to which they are attached can form a piperidine group substituted with carboxyl or alkoxycarbonyl,

R.sup.4 represents hydrogen, lower alkyl or lower alkoxy,

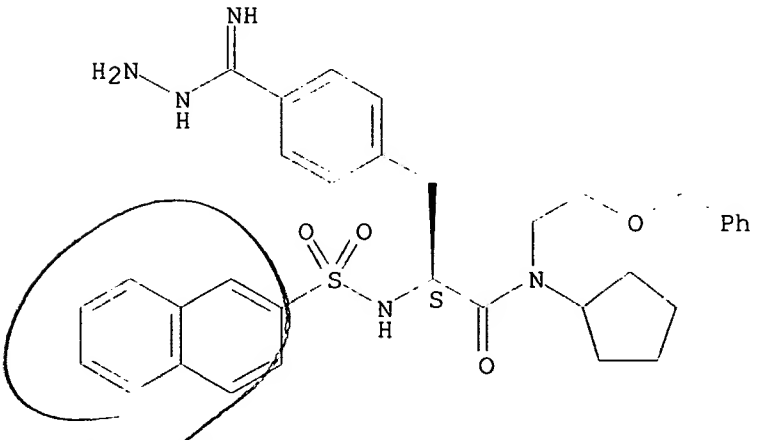
R.sup.5 represents alkanesulfonyl; alkoxycarbonyl; alkylcarbonyl; formyl; lower alkyl; aryl substituted or unsubstituted with alkoxy or haloalkyl; or hydroxy-substituted lower alkyl, and

R.sup.6 and R.sup.7 independently of one another represent hydrogen, lower alkyl or amino,

and to a process for preparation thereof and a pharmaceutical composition for thrombin inhibition which comprises the compound of formula (I) as an active ingredient.

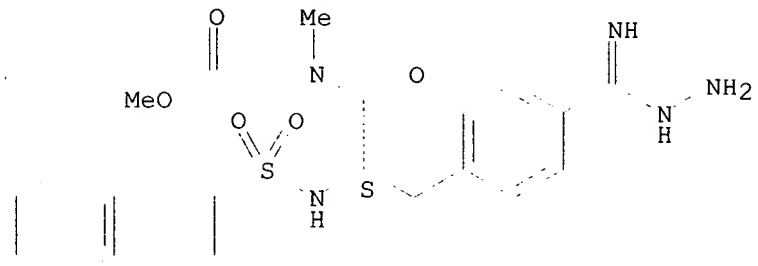
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **184770-84-1P 184771-06-0P 184771-08-2P**
184771-09-3P 184771-10-6P 184771-12-8P
184771-14-0P 184771-16-2P 184771-18-4P
184771-20-8P 184771-22-0P 184771-24-2P
184771-26-4P 184771-29-7P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)
RN 184770-84-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl[2-(phenylmethoxy)ethyl]amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



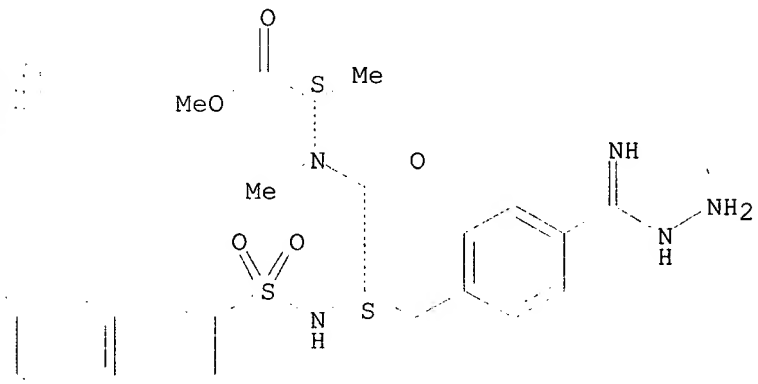
RN 184771-06-0 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



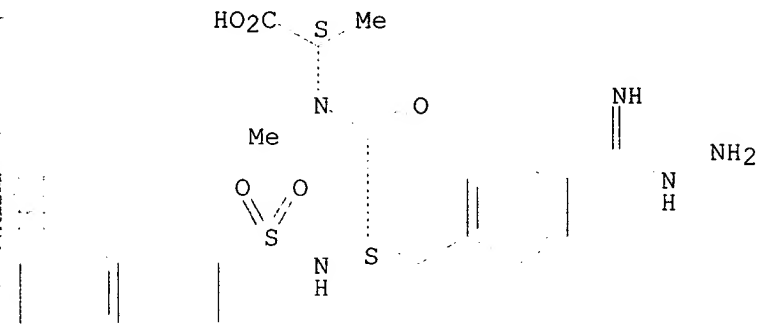
RN 184771-08-2 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



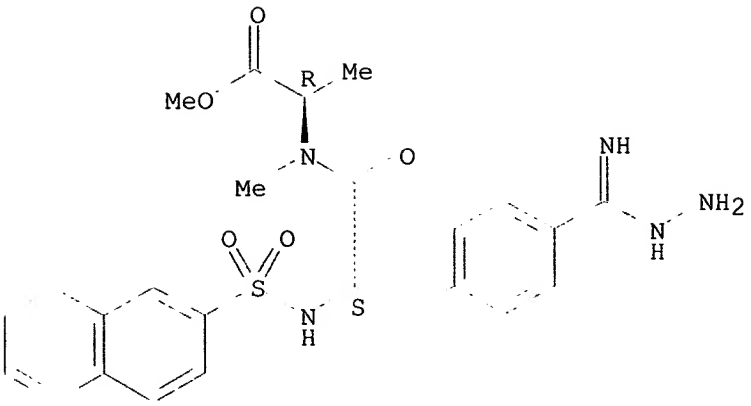
RN 184771-09-3 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



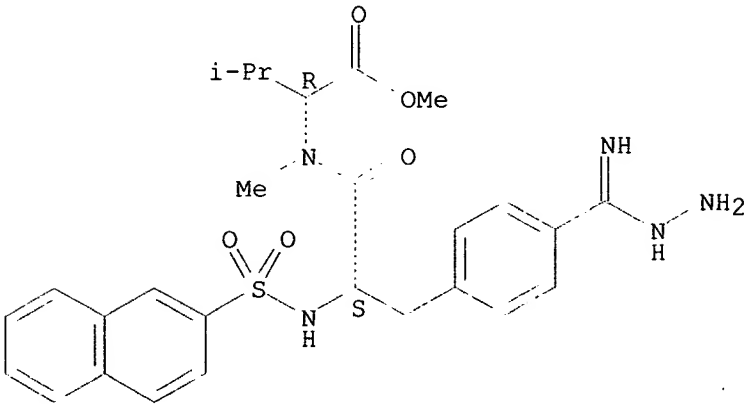
RN 184771-10-6 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



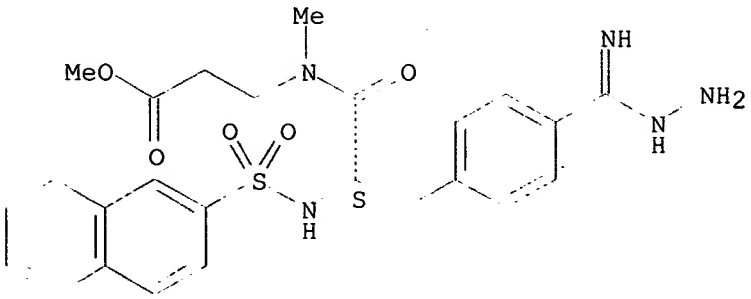
RN 184771-12-8 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



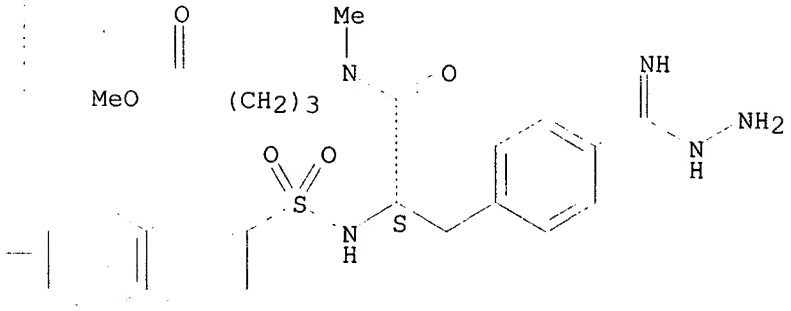
RN 184771-14-0 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



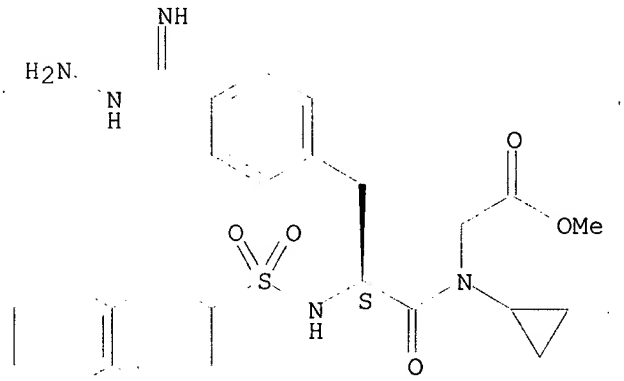
RN 184771-16-2 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



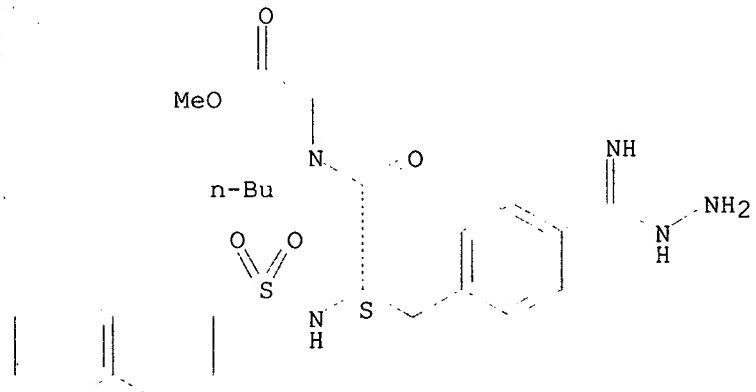
RN 184771-18-4 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



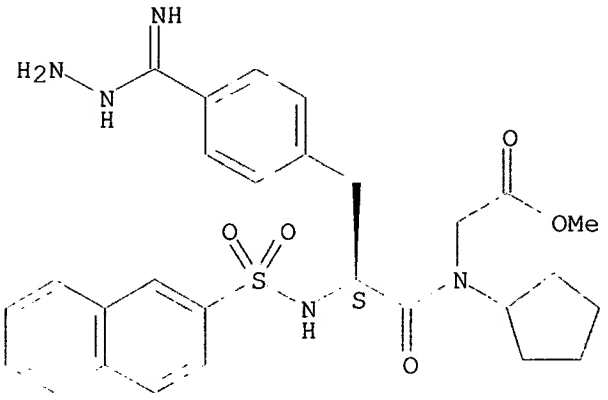
RN 184771-20-8 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



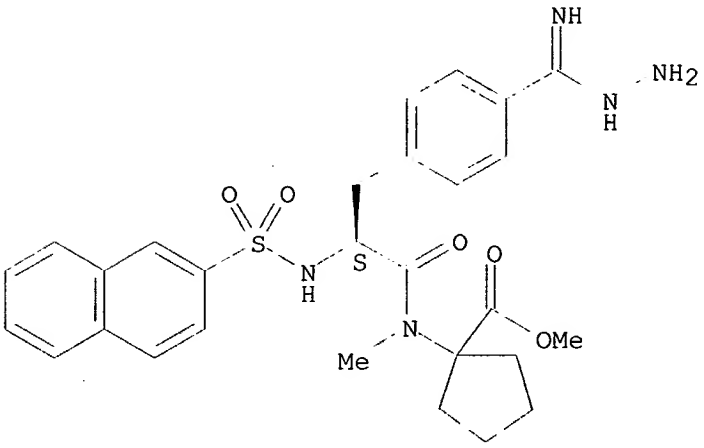
RN 184771-22-0 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



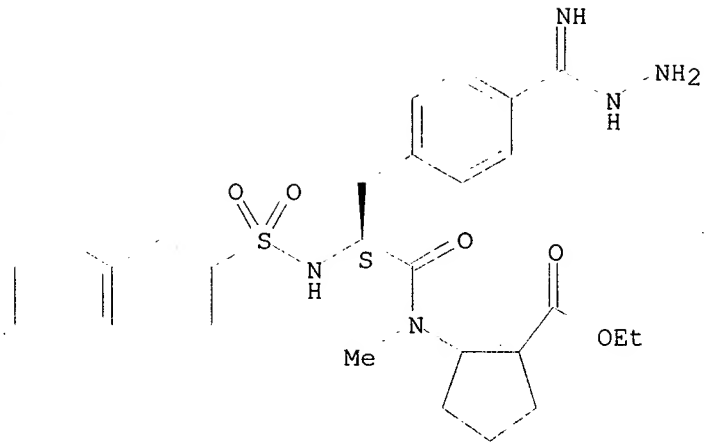
RN 184771-24-2 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



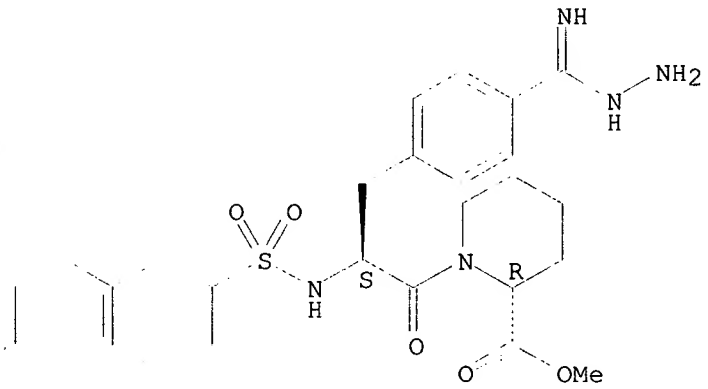
RN 184771-26-4 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, ethyl ester, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184771-29-7 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, methyl ester, (2R)- (9CI) (CA INDEX NAME)

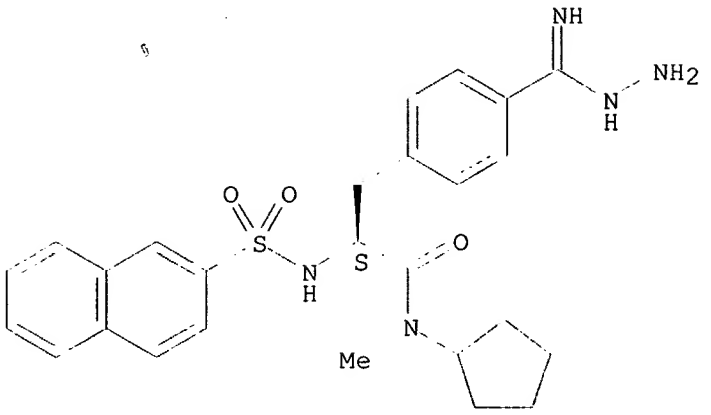
Absolute stereochemistry.



IT **184770-78-3P 184770-80-7P 184770-82-9P**
184770-85-2P 184770-87-4P 184770-88-5P
184770-90-9P 184770-91-0P 184770-92-1P
184770-93-2P 184770-94-3P 184770-95-4P
184770-96-5P 184770-97-6P 184770-99-8P
184771-00-4P 184771-01-5P 184771-02-6P
184771-03-7P 184771-07-1P 184771-11-7P
184771-13-9P 184771-15-1P 184771-17-3P
184771-19-5P 184771-21-9P 184771-23-1P
184771-25-3P 184771-27-5P 184771-28-6P
184771-30-0P 184771-31-1P 184771-32-2P
184771-33-3P 184771-34-4P 184771-35-5P
184771-36-6P 184771-37-7P 184771-38-8P
184771-39-9P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)

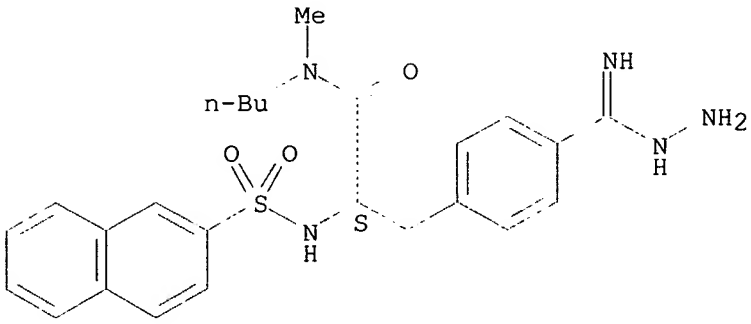
RN 184770-78-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



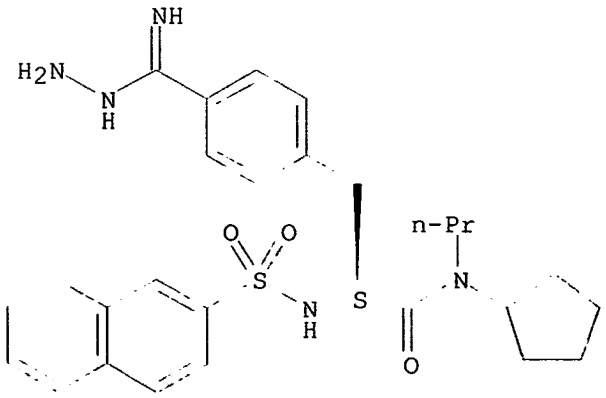
RN 184770-80-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184770-82-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylpropylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

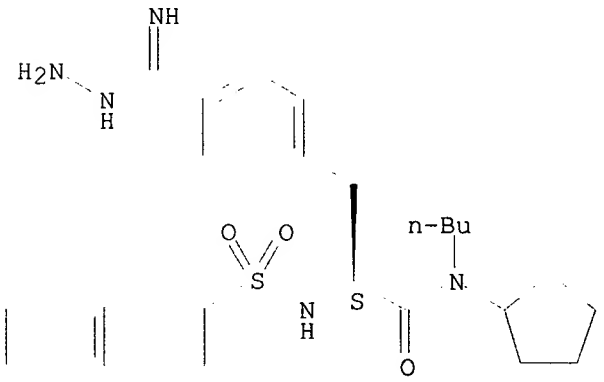
Absolute stereochemistry.



RN 184770-85-2 USPATFULL

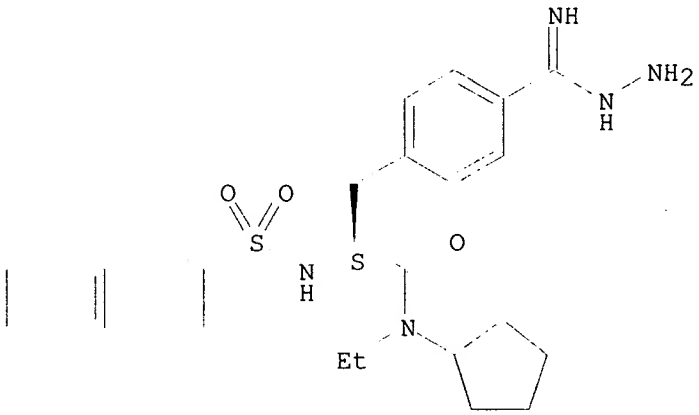
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylcyclopentylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



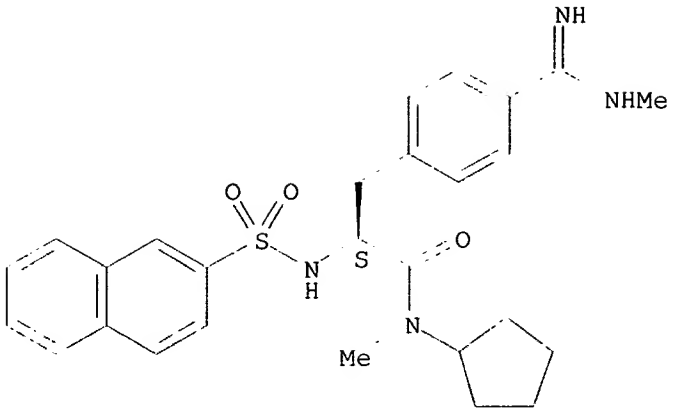
RN 184770-87-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



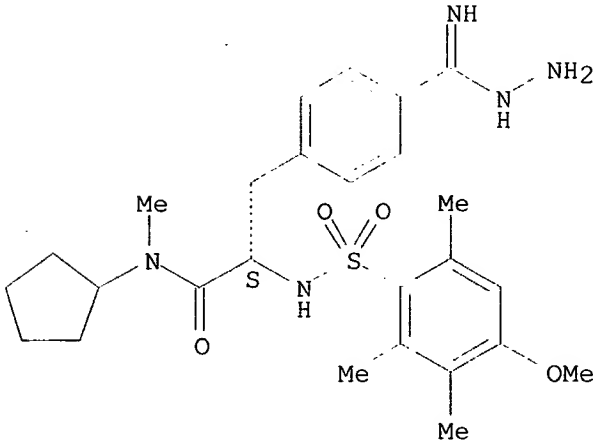
RN 184770-88-5 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-N-methyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



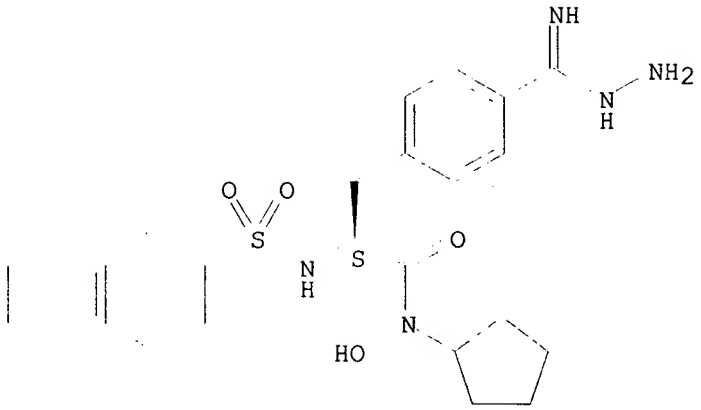
RN 184770-90-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



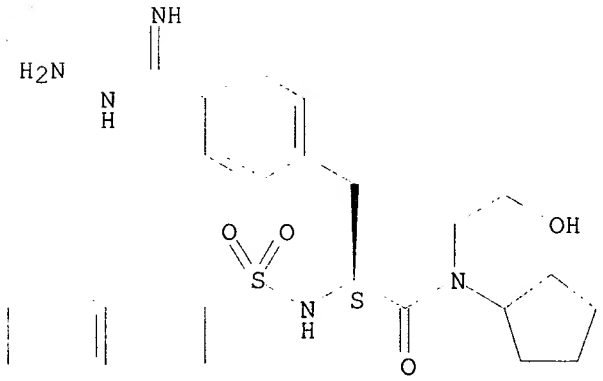
RN 184770-91-0 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylhydroxyamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



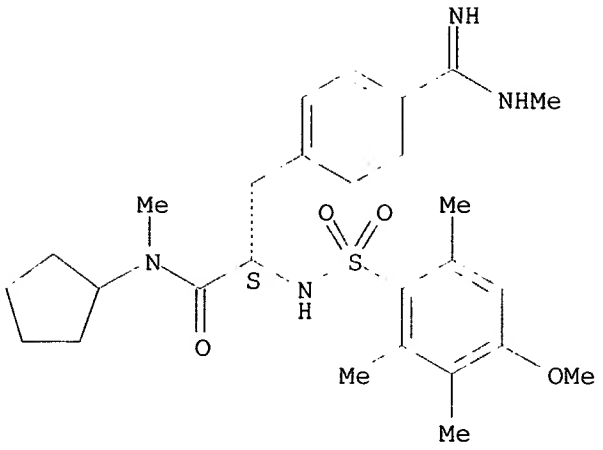
RN 184770-92-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl(2-hydroxyethyl)amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



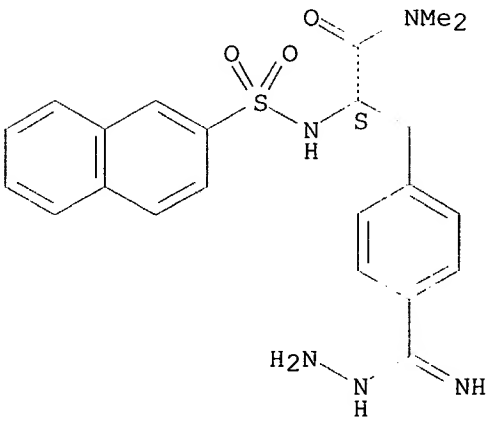
RN 184770-93-2 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-.alpha.-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



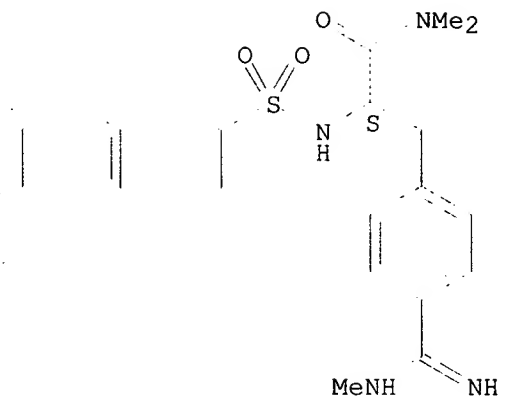
RN 184770-94-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(dimethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



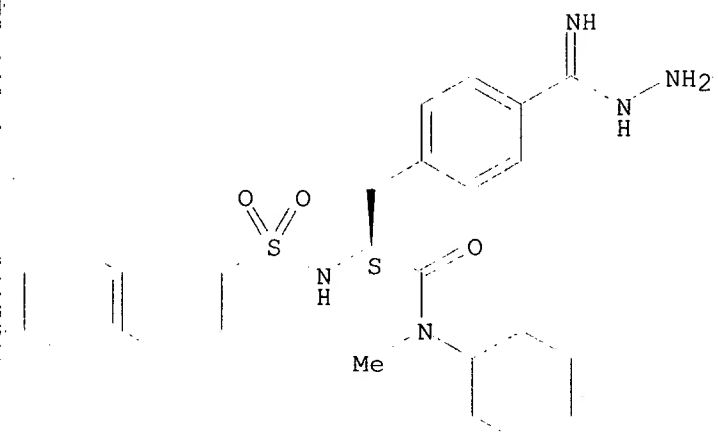
RN 184770-95-4 USPATFULL
CN Benzenepropanamide, 4-[imino(methylamino)methyl]-N,N-dimethyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



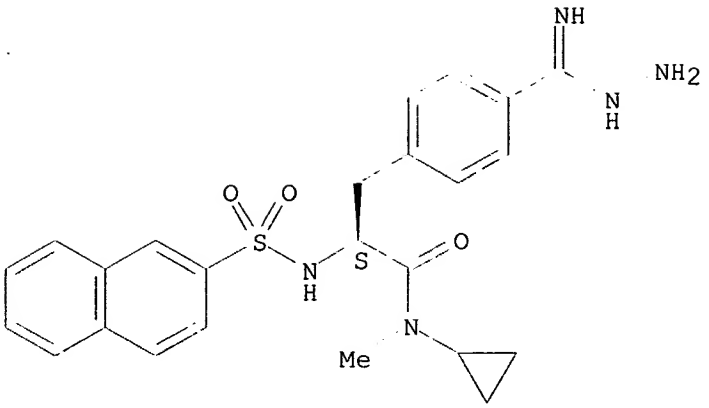
RN 184770-96-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclohexylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



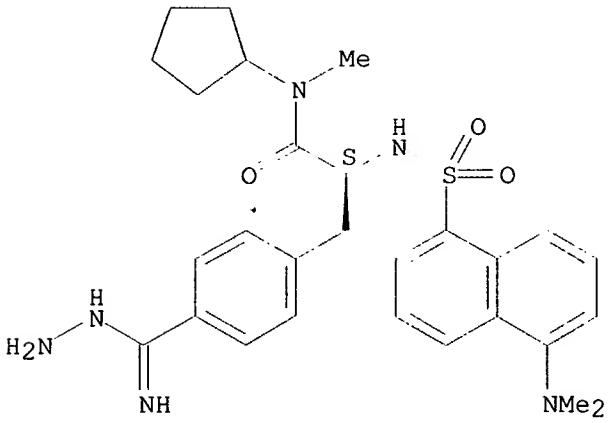
RN 184770-97-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopropylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



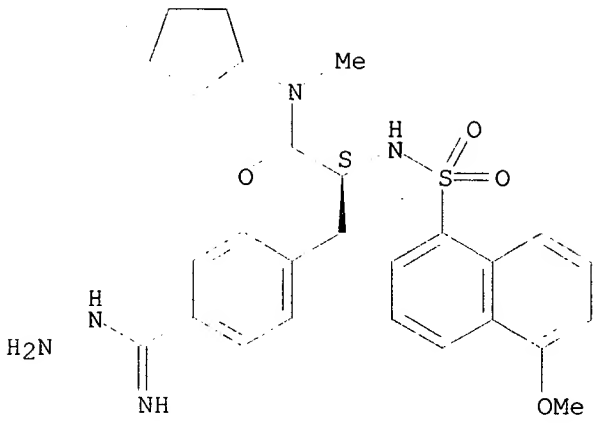
RN 184770-99-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



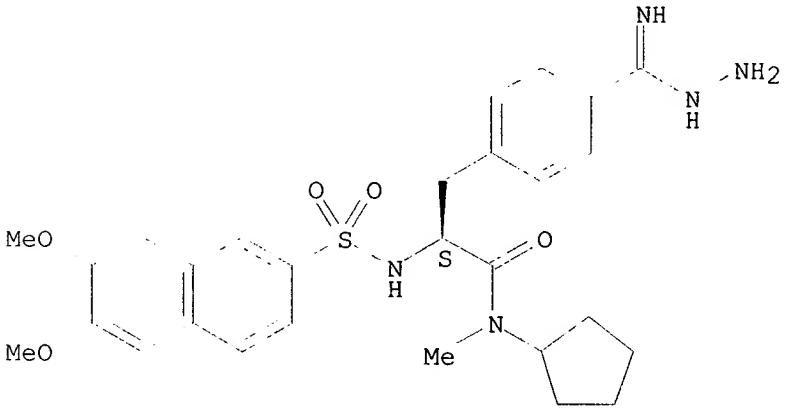
RN 184771-00-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(5-methoxy-1-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



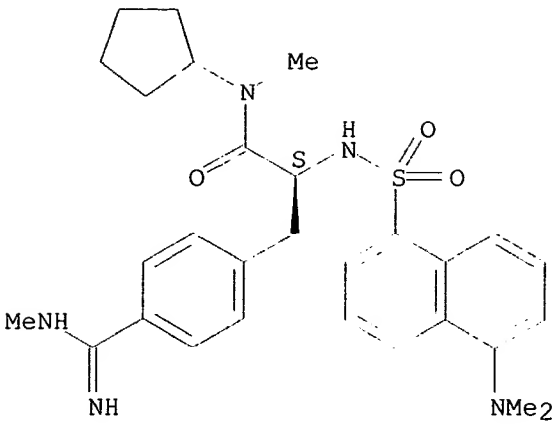
RN 184771-01-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(6,7-dimethoxy-2-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



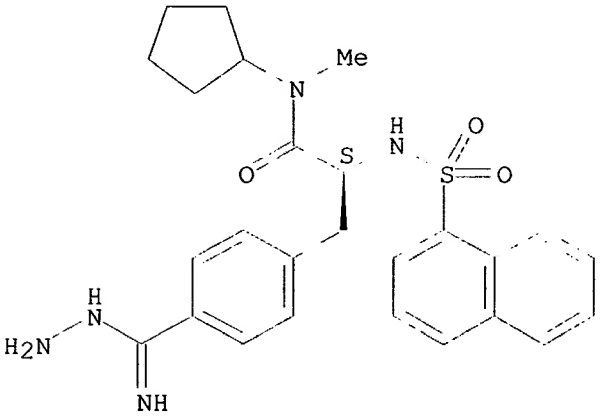
RN 184771-02-6 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-.alpha.-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-4-[imino(methylamino)methyl]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



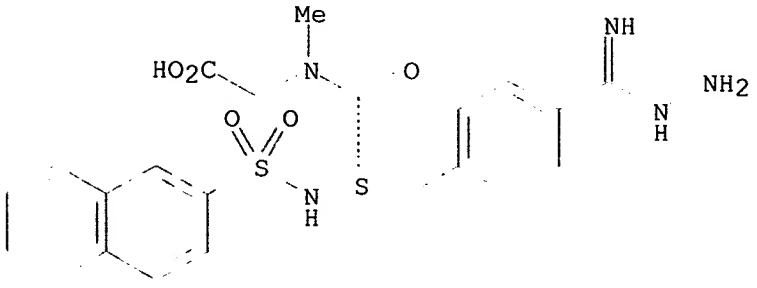
RN 184771-03-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(1-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



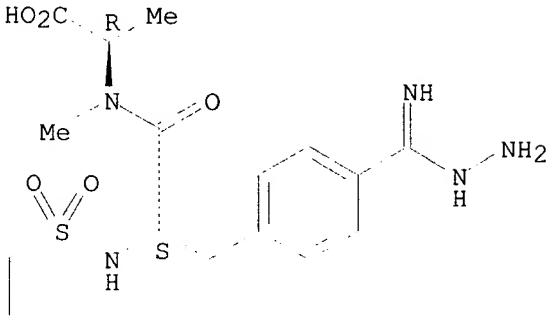
RN 184771-07-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



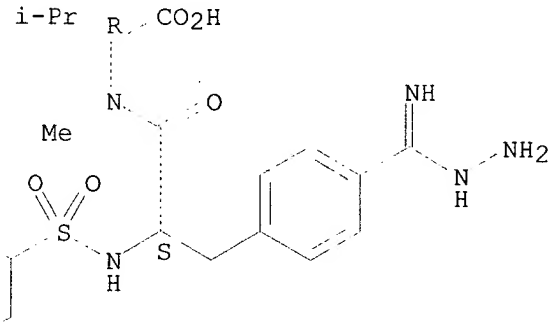
RN 184771-11-7 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



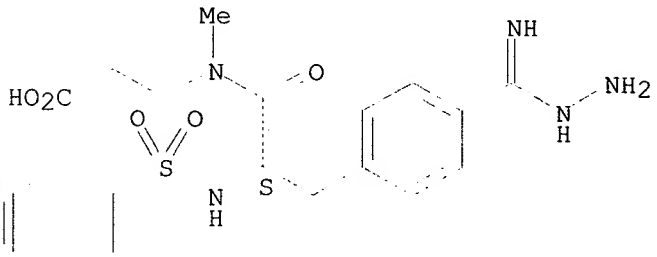
RN 184771-13-9 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



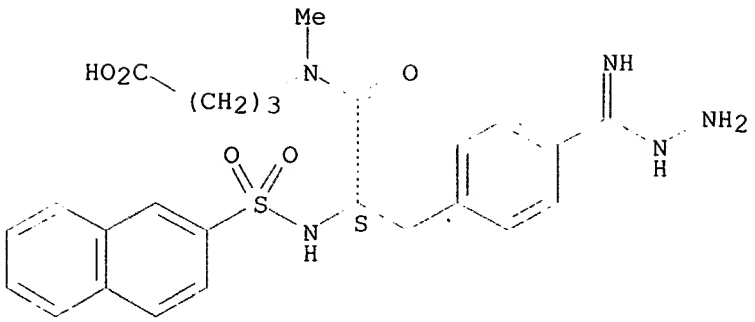
RN 184771-15-1 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



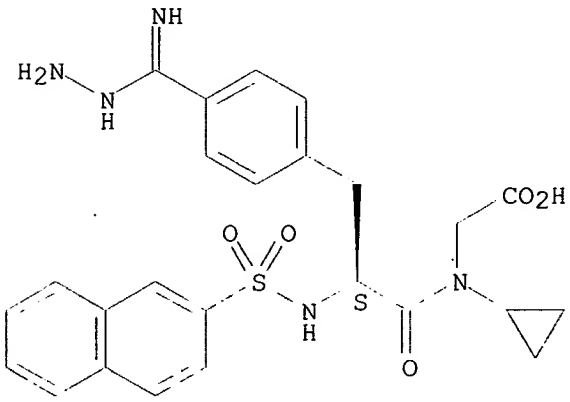
RN 184771-17-3 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



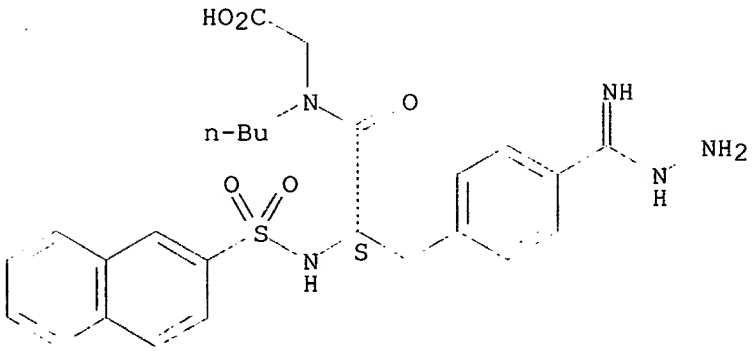
RN 184771-19-5 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



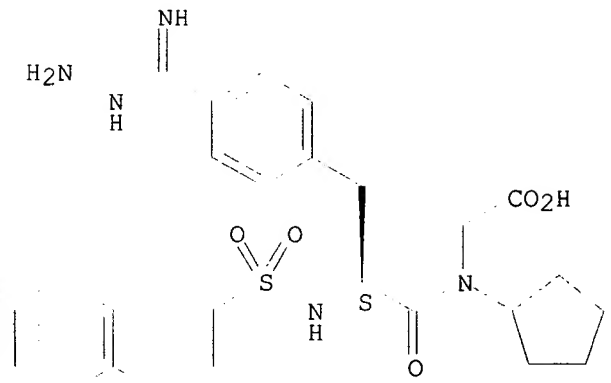
RN 184771-21-9 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



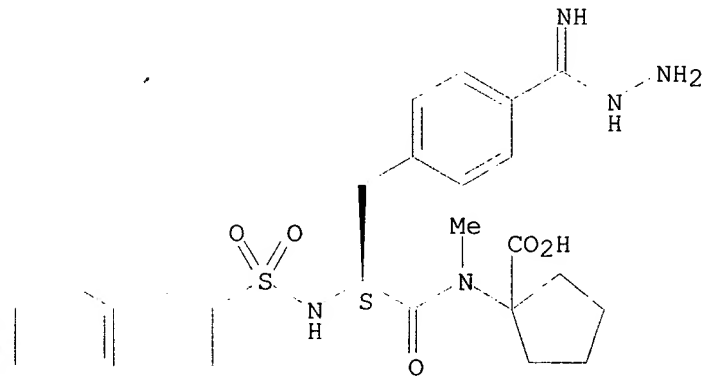
RN 184771-23-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



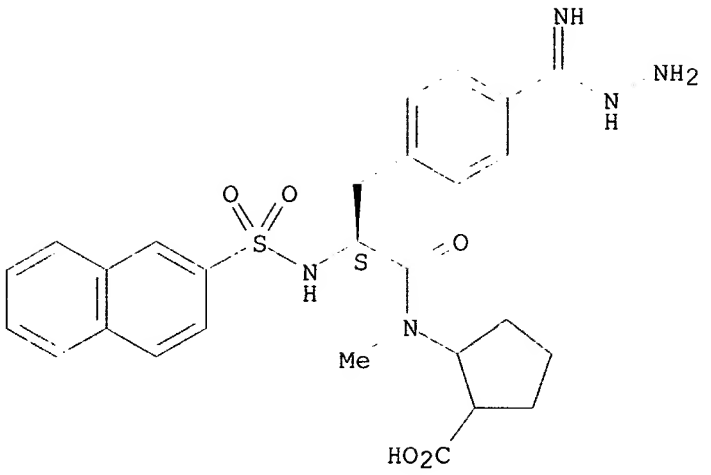
RN 184771-25-3 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



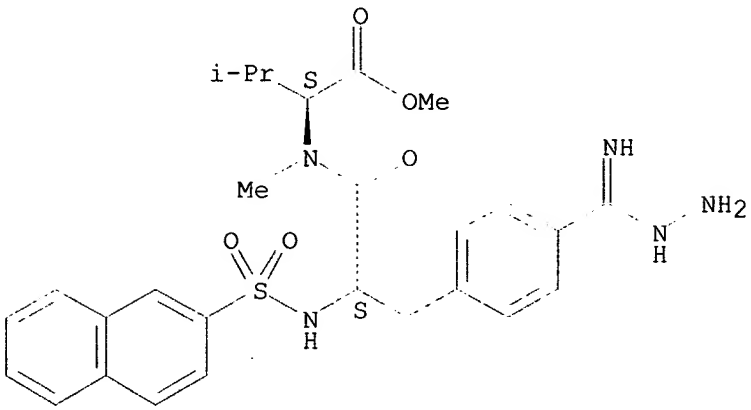
RN 184771-27-5 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



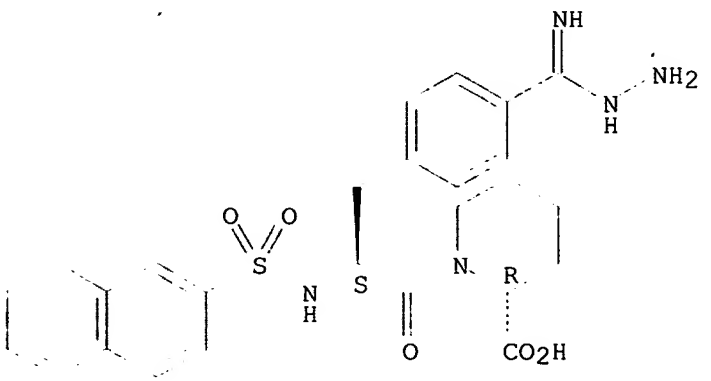
RN 184771-28-6 USPATFULL
CN L-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



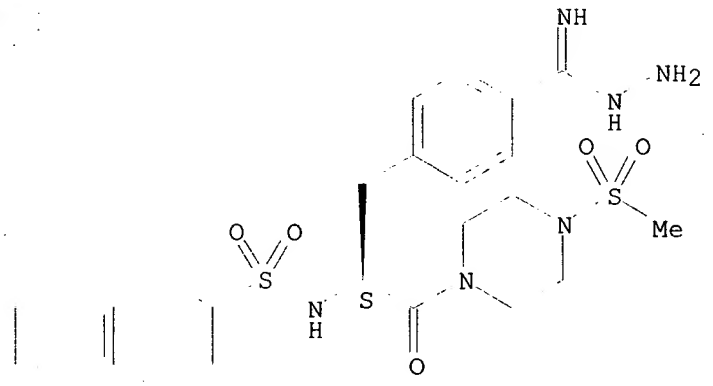
RN 184771-30-0 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



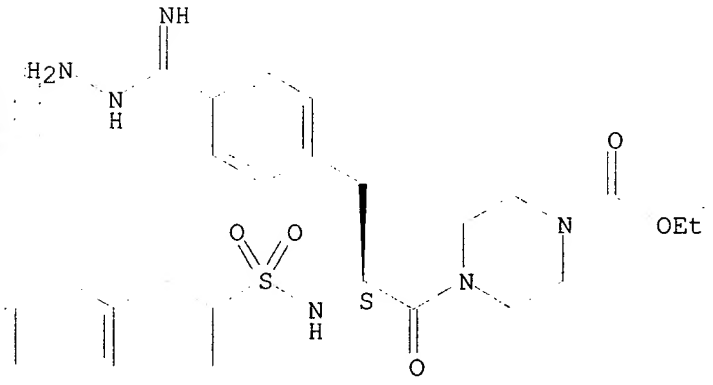
RN 184771-31-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(methylsulfonyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



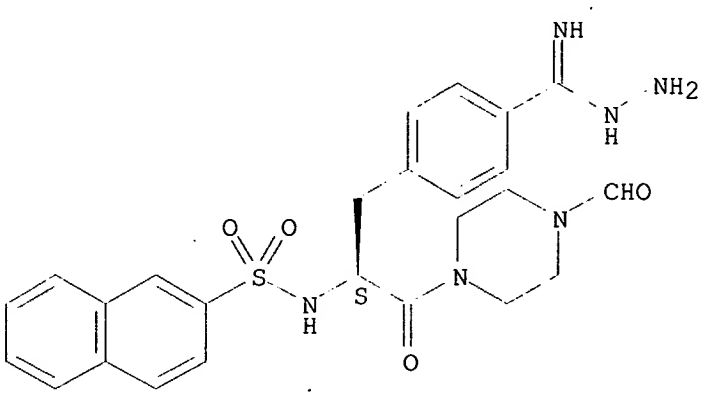
RN 184771-32-2 USPATFULL
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



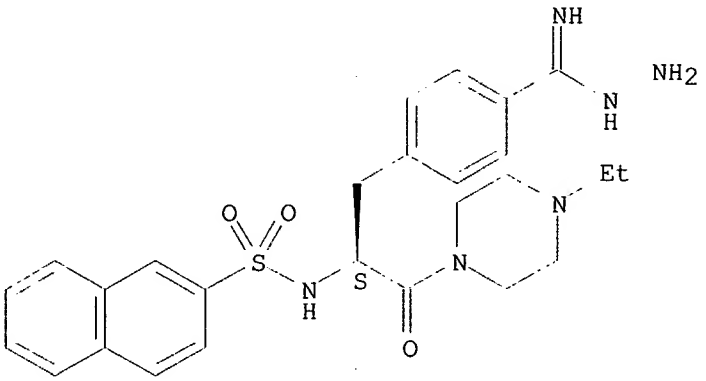
RN 184771-33-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-formyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



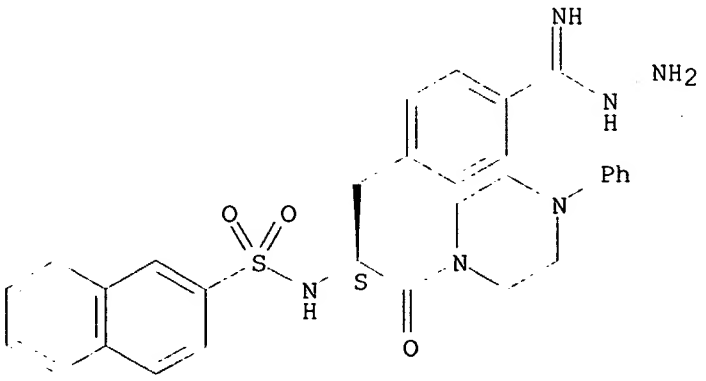
RN 184771-34-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-ethyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



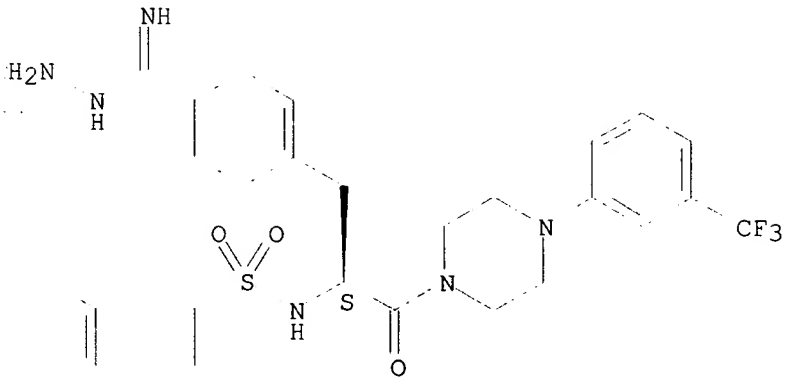
RN 184771-35-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-(4-phenyl-1-piperazinyl)propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



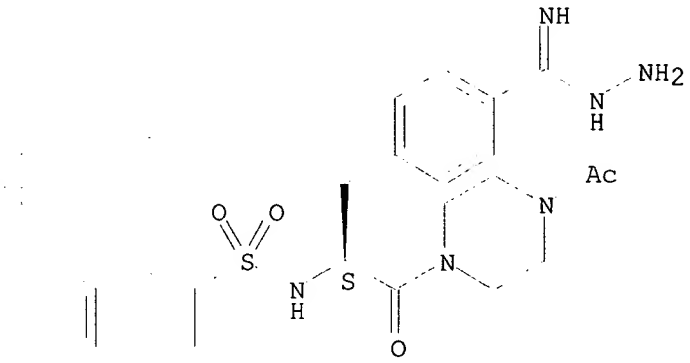
RN 184771-36-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



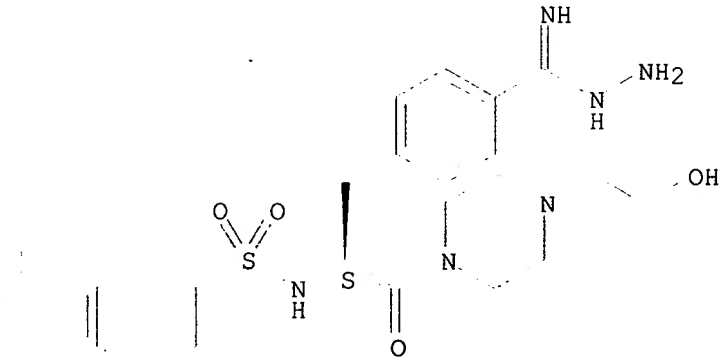
RN 184771-37-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-acetyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



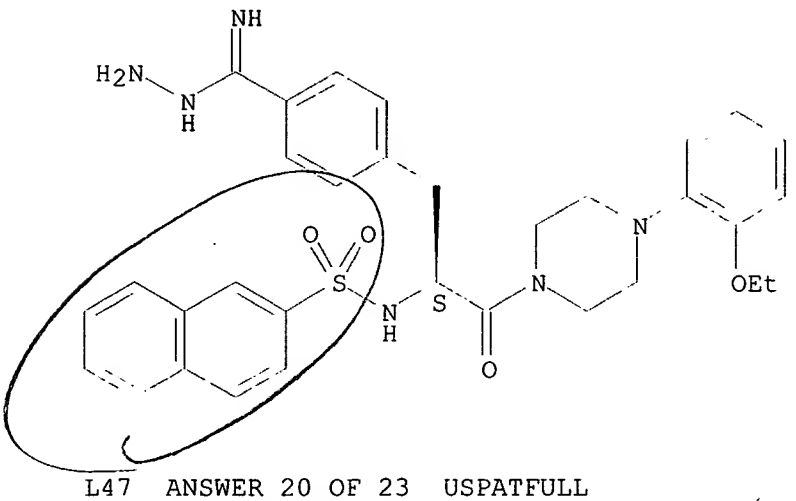
RN 184771-38-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-hydroxyethyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184771-39-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-ethoxyphenyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L47 ANSWER 20 OF 23 USPATFULL
ACCESSION NUMBER: 1998:48453 USPATFULL
TITLE: Selective thrombin inhibitors
INVENTOR(S): Oh, Yeong Soo, Daejeon, Korea, Republic of
Kim, Sang Soo, Daejeon, Korea, Republic of
Hwang, Sang Yeul, Daejeon, Korea, Republic of
Yun, Mi Kyung, Daejeon, Korea, Republic of
Hwang, Seong Ryul, Daejeon, Korea, Republic of
Hong, Seong Won, Daejeon, Korea, Republic of
Lee, Yong Hee, Daejeon, Korea, Republic of
Jeong, Yi Na, Daejeon, Korea, Republic of
Lee, Koo, Daejeon, Korea, Republic of
Shin, You Seung, Daejeon, Korea, Republic of
PATENT ASSIGNEE(S): LG Chemical Ltd., Seoul, Korea, Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5747535		19980505	
APPLICATION INFO.:	US 1996-586208		19960116	(8)

	NUMBER	DATE
PRIORITY INFORMATION:	KR 1995-10383	19950428

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: McDermott Will & Emery
NUMBER OF CLAIMS: 5
EXEMPLARY CLAIM: 1
LINE COUNT: 2112
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a novel selective thrombin inhibitor having the following formula (I), which is also effective by oral administration: ##STR1## in which R.sup.1 represents acetyl substituted with aryl or aryloxy, or represents sulfonyl substituted with substituted or unsubstituted aryl or N-containing heterocyclic group,

X represents a group of formula ##STR2## R.sup.2 and R.sup.3

independently of one another represent hydrogen; cycloalkyl substituted or unsubstituted with carboxyl or alkoxycarbonyl; arylalkyloxy; hydroxy; or lower alkyl substituted or unsubstituted with carboxyl, alkoxycarbonyl or hydroxy, or

R.sup.2 and R.sup.3 together with nitrogen atom to which they are attached can form a piperidine group substituted with carboxyl or alkoxycarbonyl,

R.sup.4 represents hydrogen, lower alkyl or lower alkoxy,

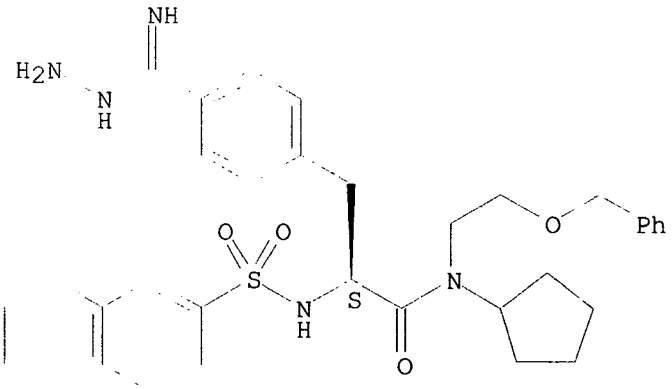
R.sup.5 represents alkanesulfonyl; alkoxycarbonyl; alkylcarbonyl; formyl; lower alkyl; aryl substituted or unsubstituted with alkoxy or haloalkyl; or hydroxy-substituted lower alkyl, and

R.sup.6 and R.sup.7 independently of one another represent hydrogen, lower alkyl or amino,

and to a process for preparation thereof and a pharmaceutical composition for thrombin inhibition which comprises the compound of formula (I) as an active ingredient.

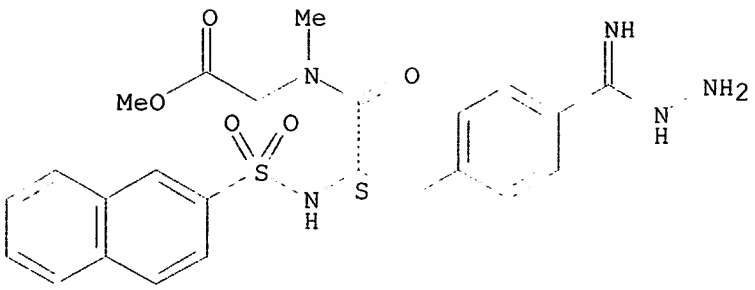
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **184770-84-1P 184771-06-0P 184771-08-2P**
184771-09-3P 184771-10-6P 184771-12-8P
184771-14-0P 184771-16-2P 184771-18-4P
184771-20-8P 184771-22-0P 184771-24-2P
184771-26-4P 184771-29-7P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)
RN 184770-84-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl[2-(phenylmethoxy)ethyl]amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



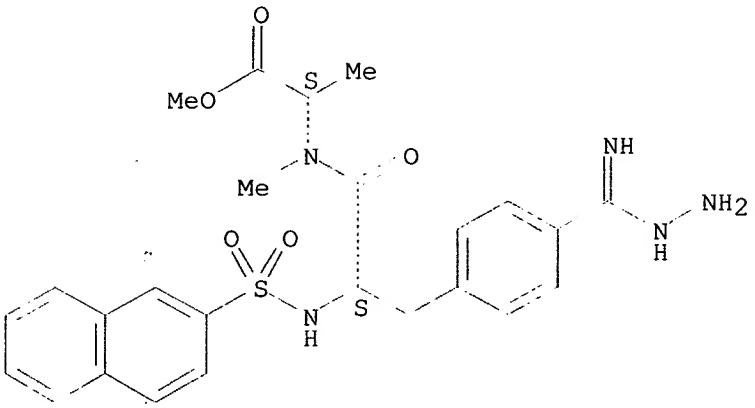
RN 184771-06-0 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



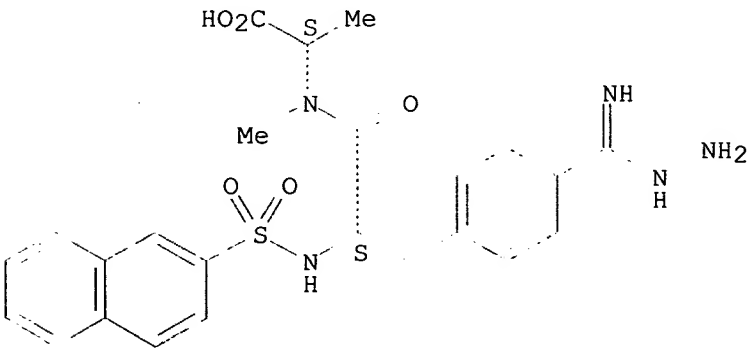
RN 184771-08-2 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



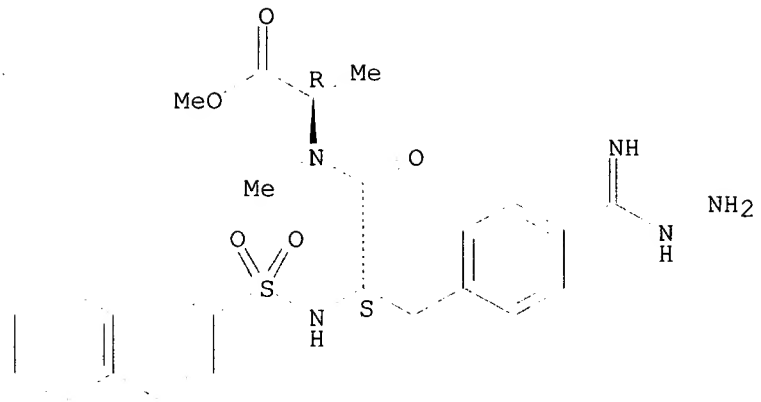
RN 184771-09-3 USPATFULL
CN L-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



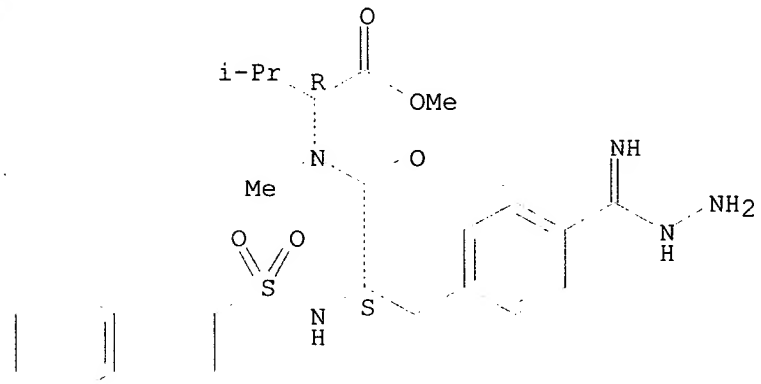
RN 184771-10-6 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



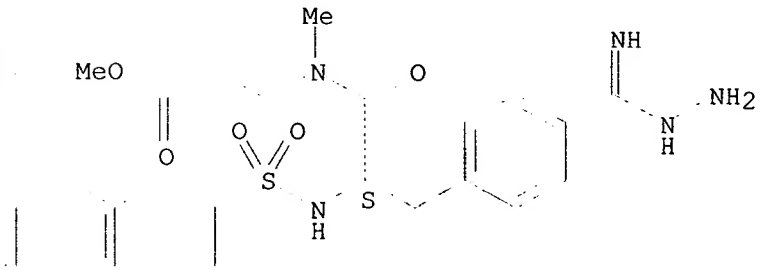
RN 184771-12-8 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



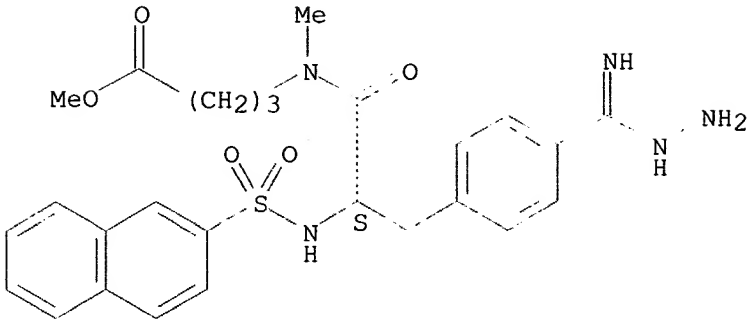
RN 184771-14-0 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



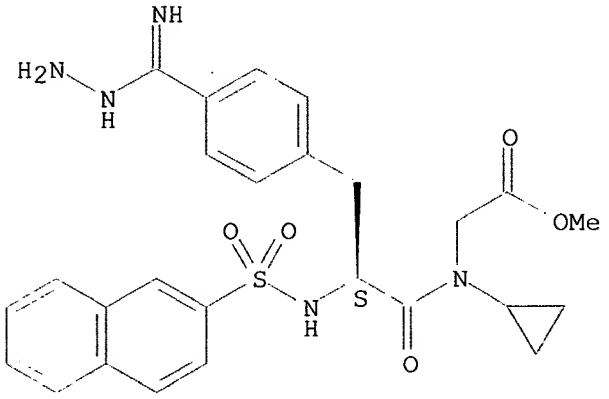
RN 184771-16-2 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



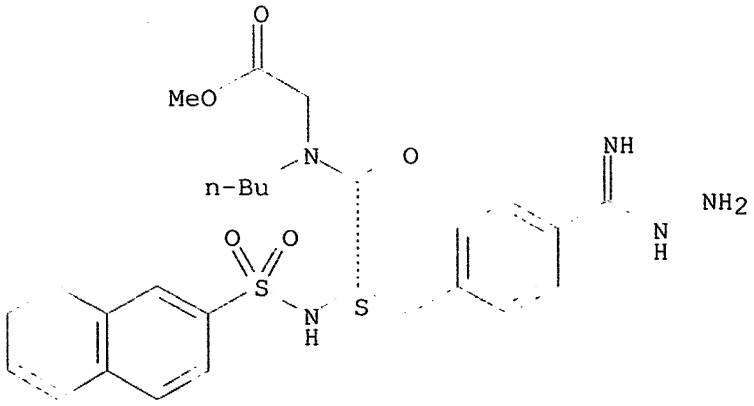
RN 184771-18-4 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



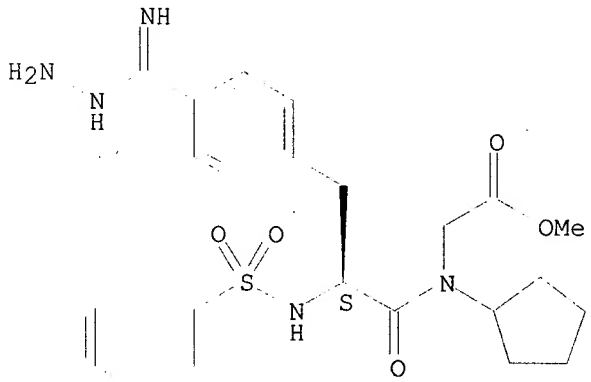
RN 184771-20-8 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



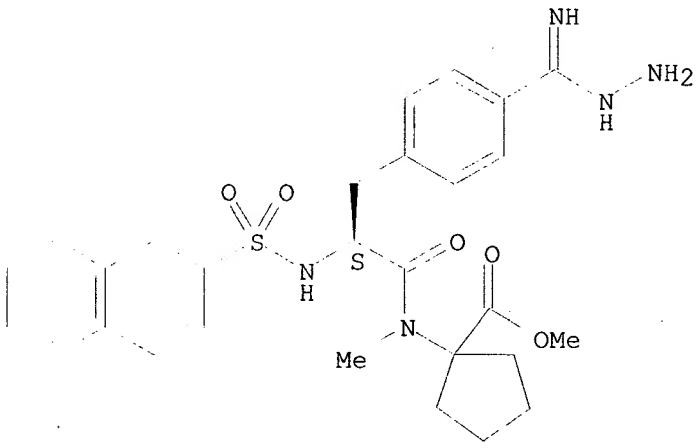
RN 184771-22-0 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



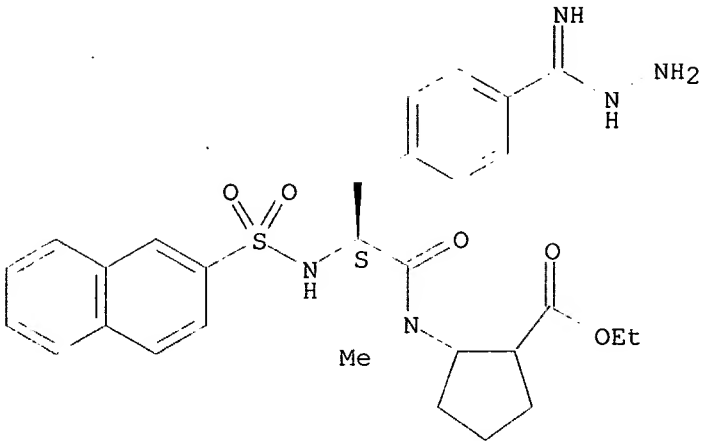
RN 184771-24-2 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



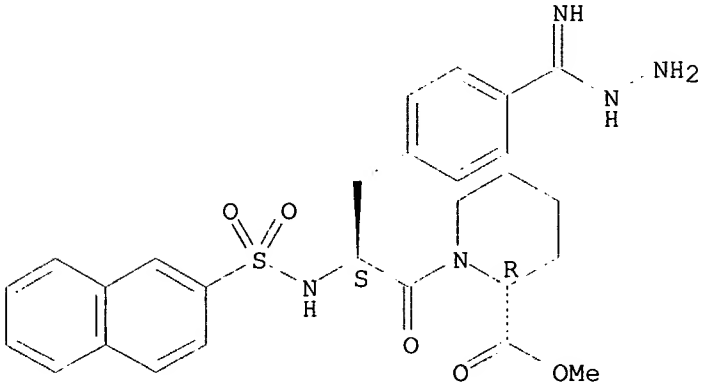
RN 184771-26-4 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, ethyl ester, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



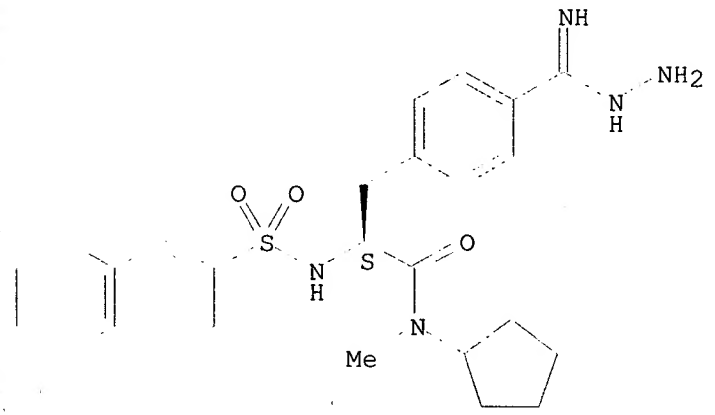
RN 184771-29-7 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, methyl ester, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



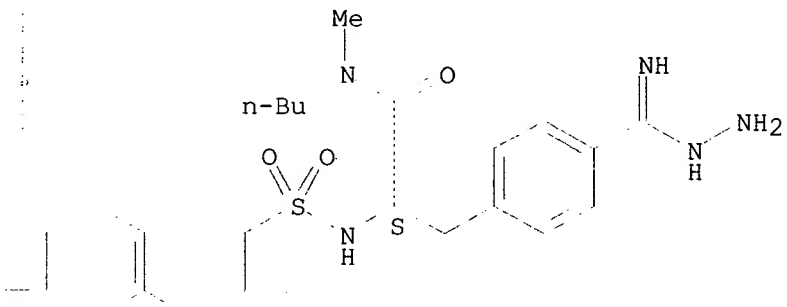
IT **184770-78-3P 184770-80-7P 184770-82-9P**
184770-85-2P 184770-87-4P 184770-88-5P
184770-90-9P 184770-91-0P 184770-92-1P
184770-93-2P 184770-94-3P 184770-95-4P
184770-96-5P 184770-97-6P 184770-99-8P
184771-00-4P 184771-01-5P 184771-02-6P
184771-03-7P 184771-07-1P 184771-11-7P
184771-13-9P 184771-15-1P 184771-17-3P
184771-19-5P 184771-21-9P 184771-23-1P
184771-25-3P 184771-27-5P 184771-28-6P
184771-30-0P 184771-31-1P 184771-32-2P
184771-33-3P 184771-34-4P 184771-35-5P
184771-36-6P 184771-37-7P 184771-38-8P
184771-39-9P
(prepn. of amidinophenylalanine amide derivs. as selective thrombin inhibitors)
RN 184770-78-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



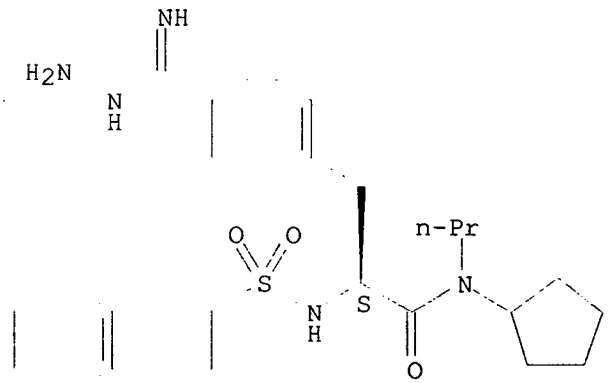
RN 184770-80-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184770-82-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylpropylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

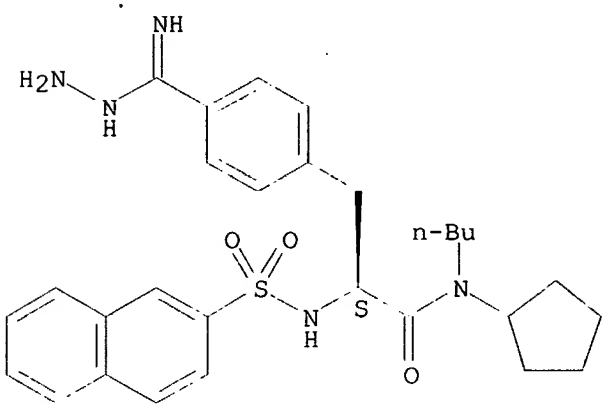
Absolute stereochemistry.



RN 184770-85-2 USPATFULL

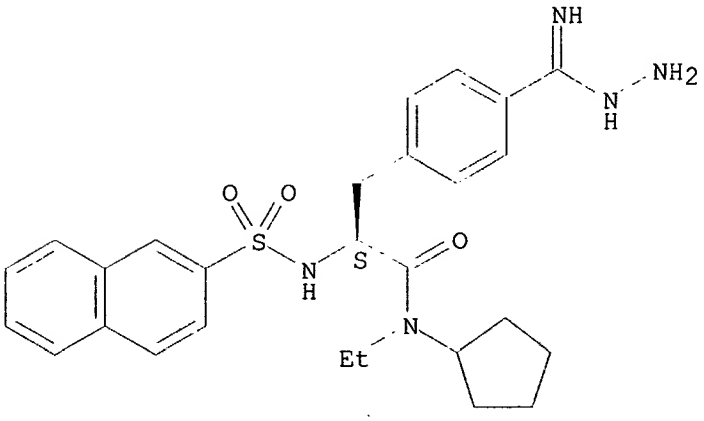
CN Benzenecarboximidic acid, 4-[(2S)-3-(butylcyclopentylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



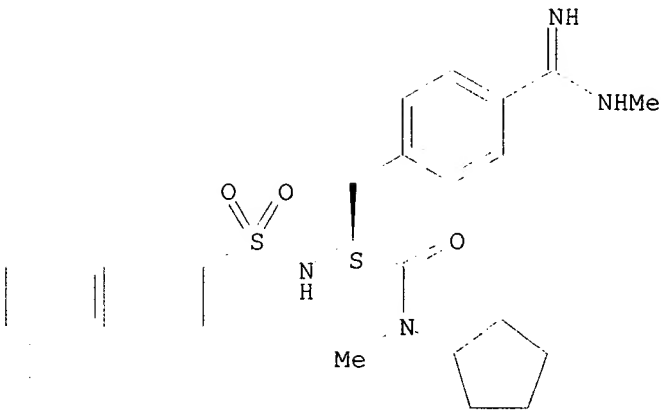
RN 184770-87-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



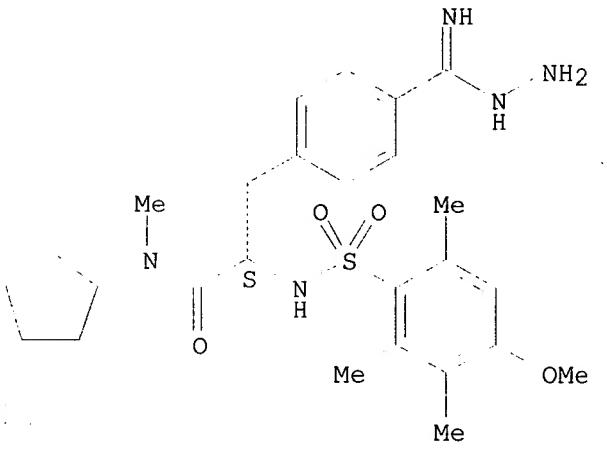
RN 184770-88-5 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-N-methyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



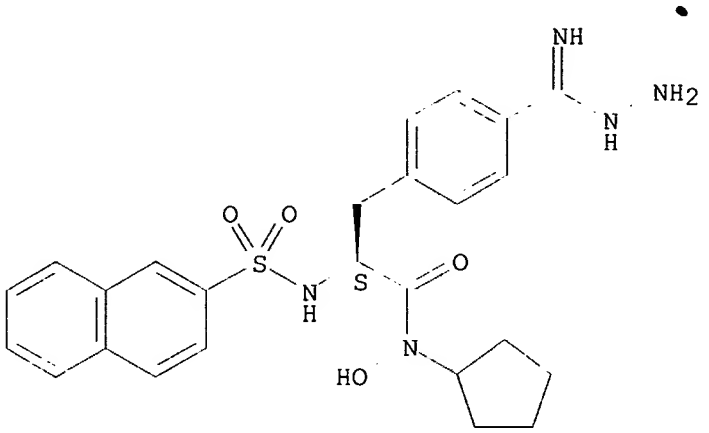
RN 184770-90-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



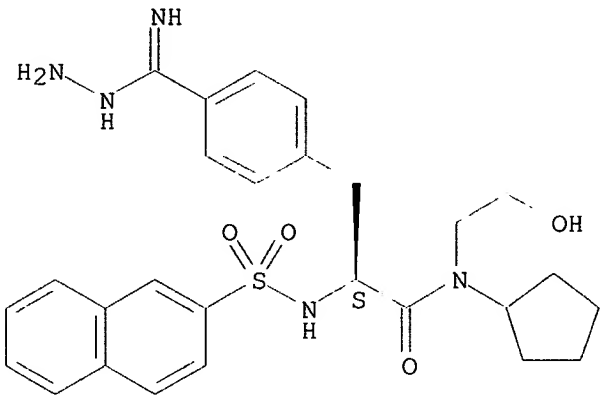
RN 184770-91-0 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylhydroxyamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



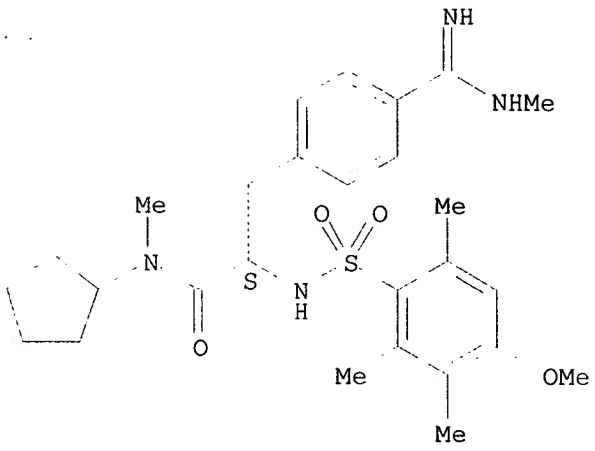
RN 184770-92-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[cyclopentyl(2-hydroxyethyl)amino]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



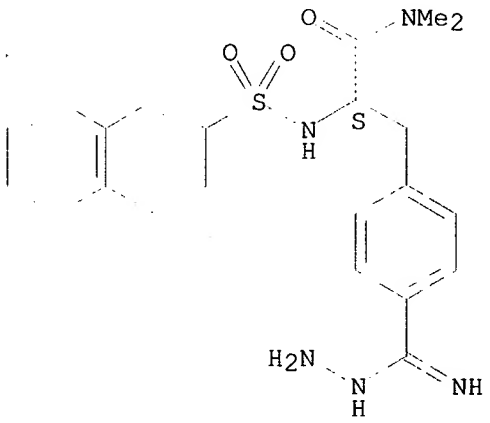
RN 184770-93-2 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-4-[imino(methylamino)methyl]-.alpha.-[[(4-methoxy-2,3,6-trimethylphenyl)sulfonyl]amino]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



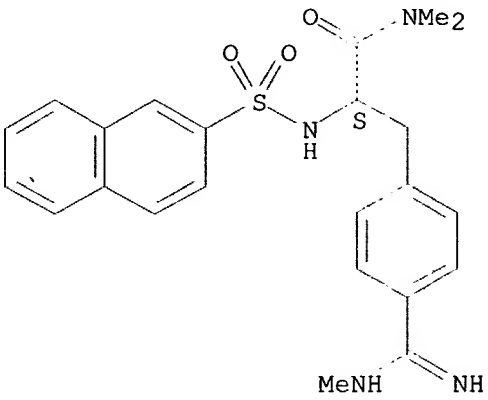
RN 184770-94-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(dimethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



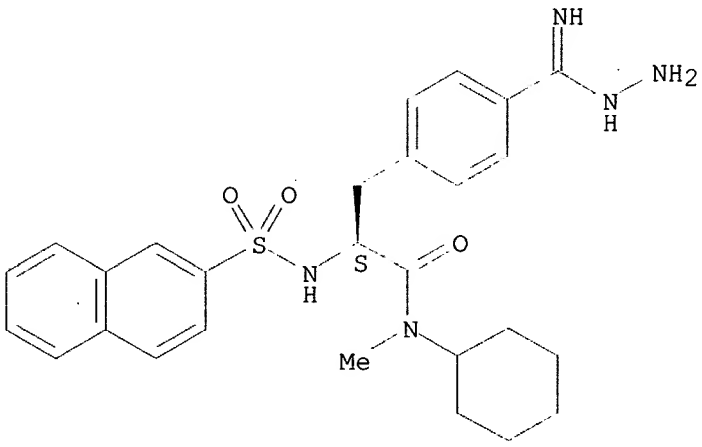
RN 184770-95-4 USPATFULL
CN Benzenepropanamide, 4-[imino(methylamino)methyl]-N,N-dimethyl-.alpha.-[(2-naphthalenylsulfonyl)amino]-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



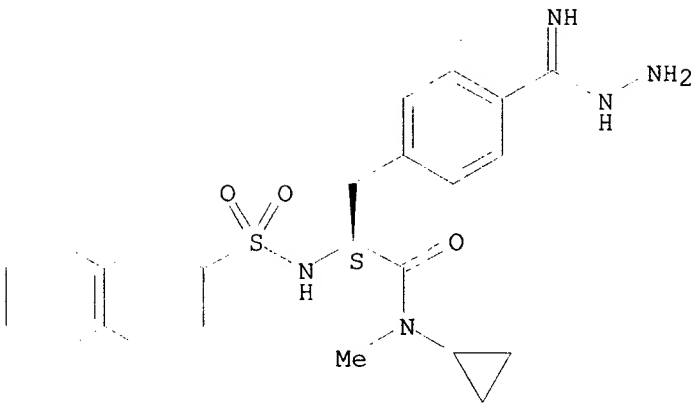
RN 184770-96-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclohexylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



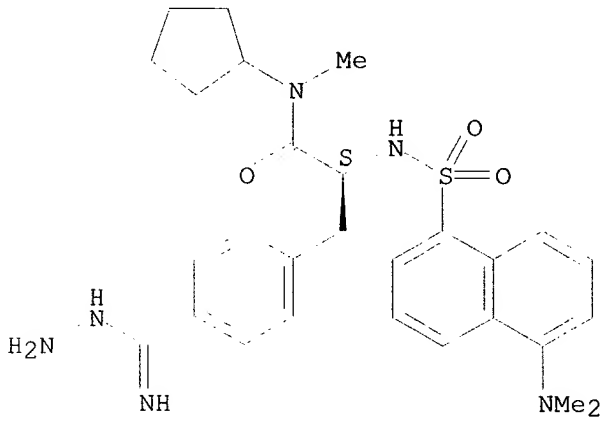
RN 184770-97-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopropylmethylamino)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



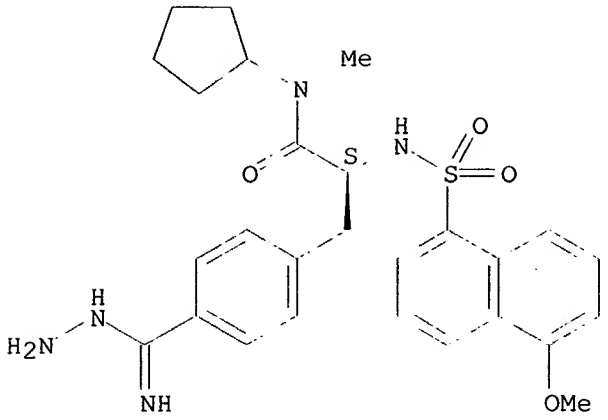
RN 184770-99-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



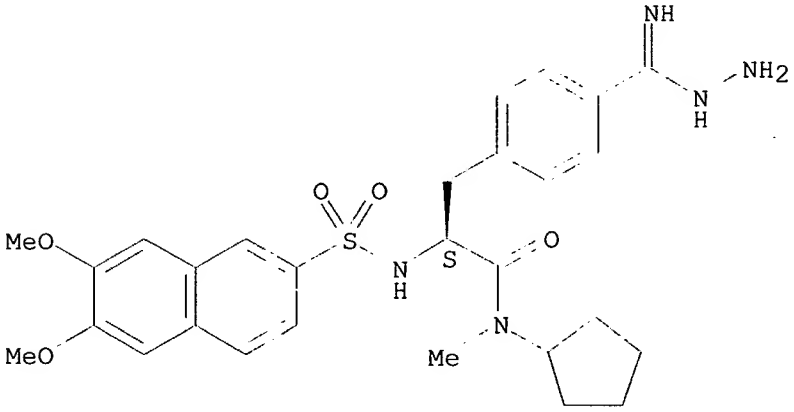
RN 184771-00-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(5-methoxy-1-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



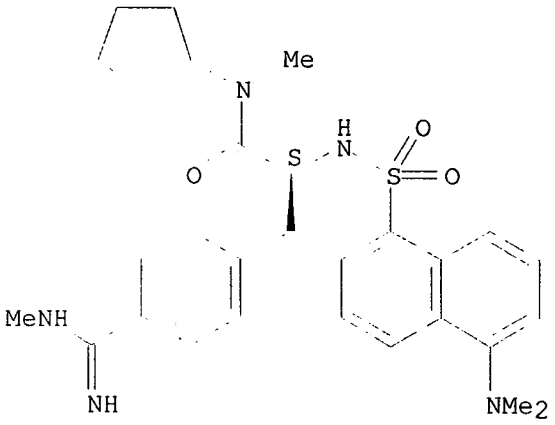
RN 184771-01-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[[(6,7-dimethoxy-2-naphthalenyl)sulfonyl]amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



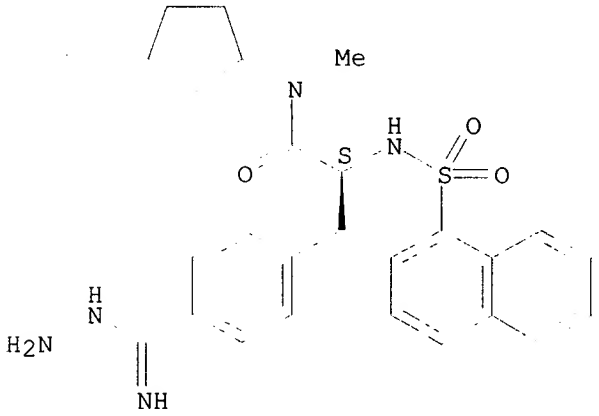
RN 184771-02-6 USPATFULL
CN Benzenepropanamide, N-cyclopentyl-.alpha.-[[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]amino]-4-[imino(methylamino)methyl]-N-methyl-, (.alpha.S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



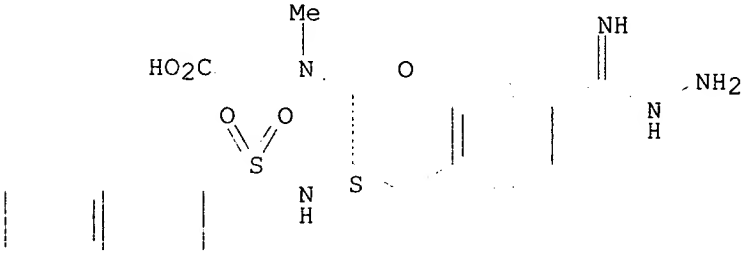
RN 184771-03-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(cyclopentylmethylamino)-2-[(1-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



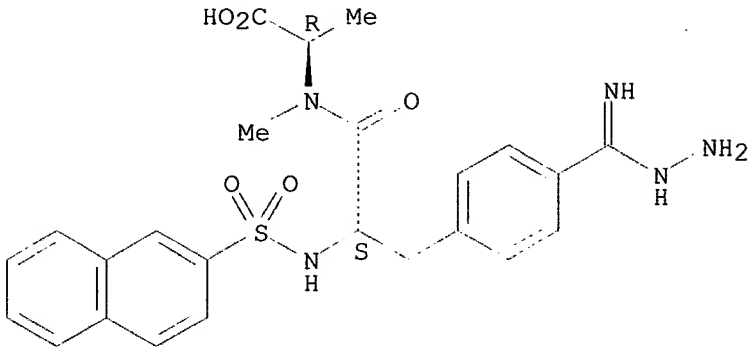
RN 184771-07-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



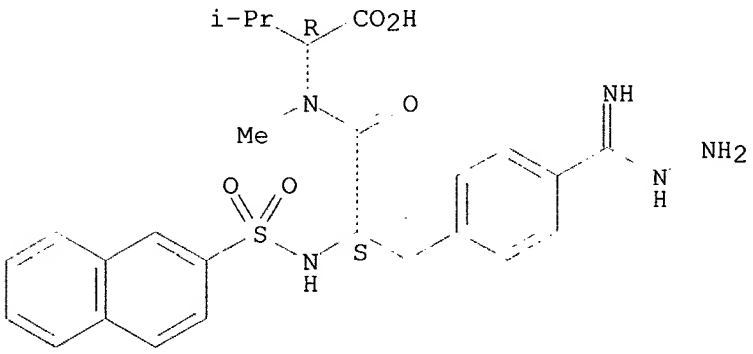
RN 184771-11-7 USPATFULL
CN D-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



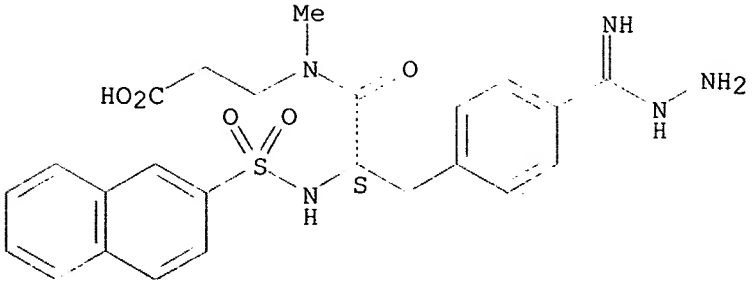
RN 184771-13-9 USPATFULL
CN D-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



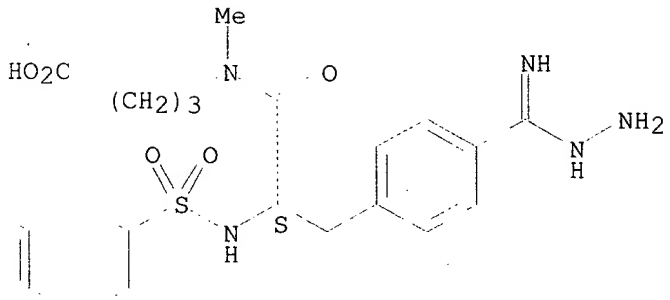
RN 184771-15-1 USPATFULL
CN .beta.-Alanine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



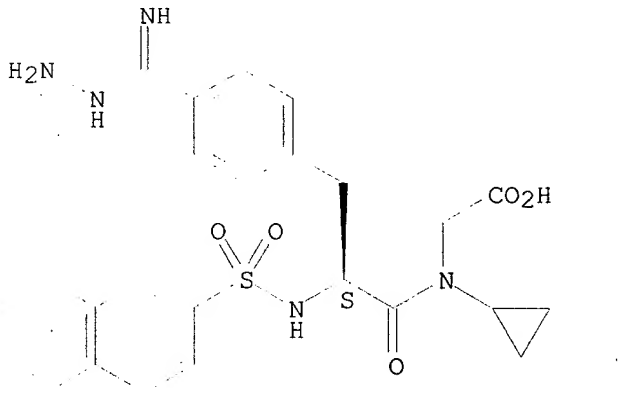
RN 184771-17-3 USPATFULL
CN Butanoic acid, 4-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



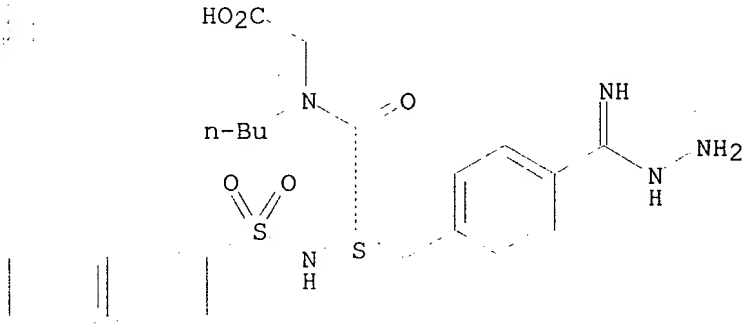
RN 184771-19-5 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopropyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



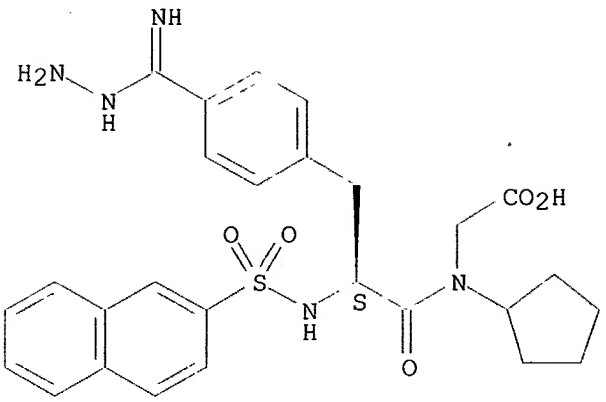
RN 184771-21-9 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-butyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



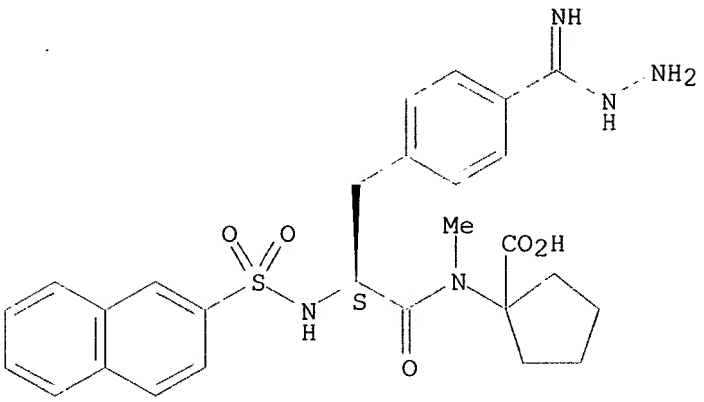
RN 184771-23-1 USPATFULL
CN Glycine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-cyclopentyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



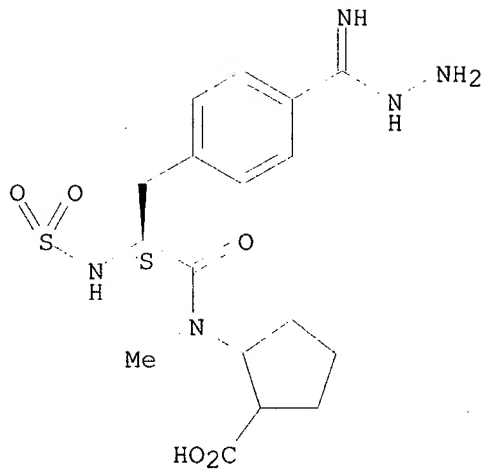
RN 184771-25-3 USPATFULL
CN Cyclopentanecarboxylic acid, 1-[[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



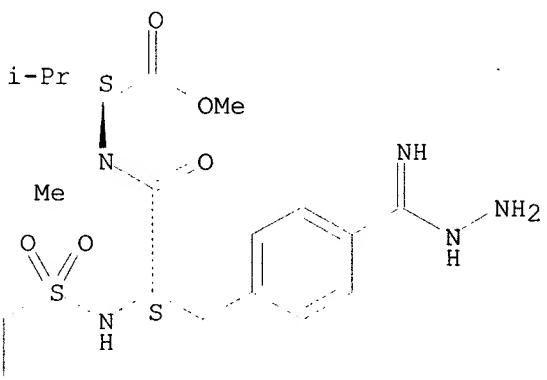
RN 184771-27-5 USPATFULL
CN Cyclopentanecarboxylic acid, 2-[[3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]methylamino]-, [2(S)]-[partial]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



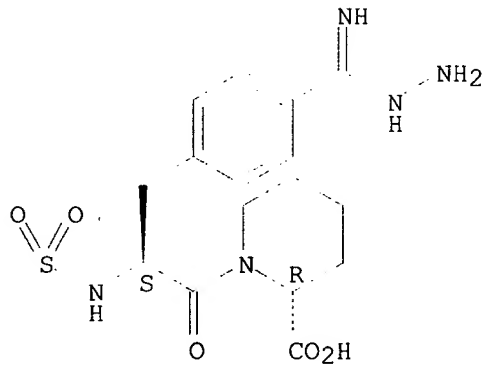
RN 184771-28-6 USPATFULL
CN L-Valine, 4-(hydrazinoiminomethyl)-N-(2-naphthalenylsulfonyl)-L-phenylalanyl-N-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



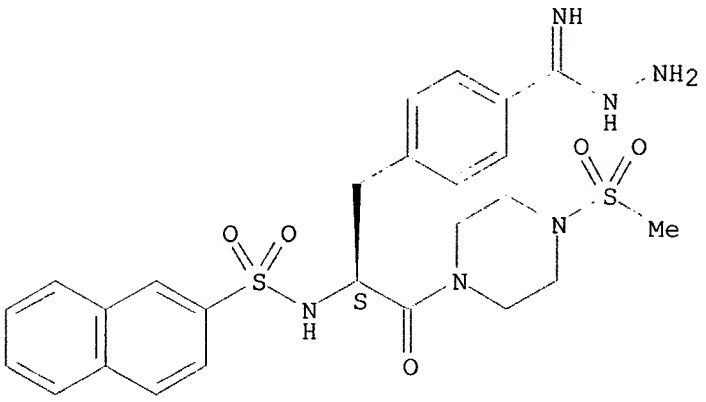
RN 184771-30-0 USPATFULL
CN 2-Piperidinecarboxylic acid, 1-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



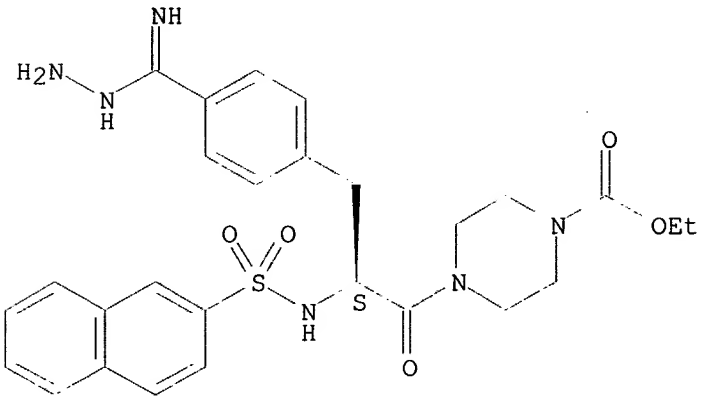
RN 184771-31-1 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(methylsulfonyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



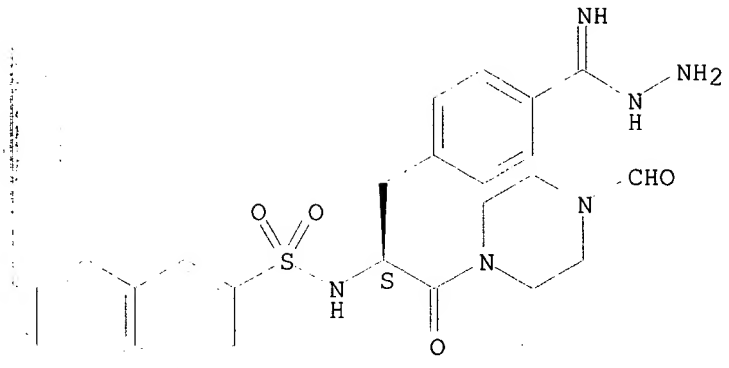
RN 184771-32-2 USPATFULL
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[4-(hydrazinoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



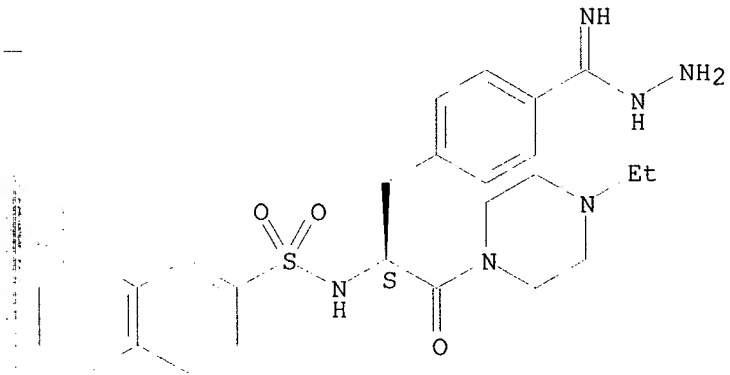
RN 184771-33-3 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-formyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



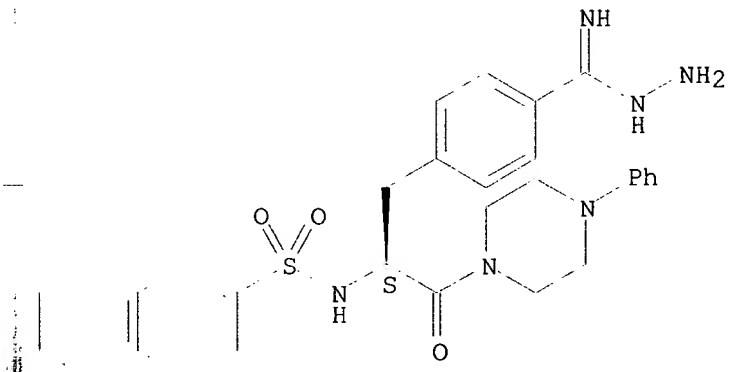
RN 184771-34-4 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-ethyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



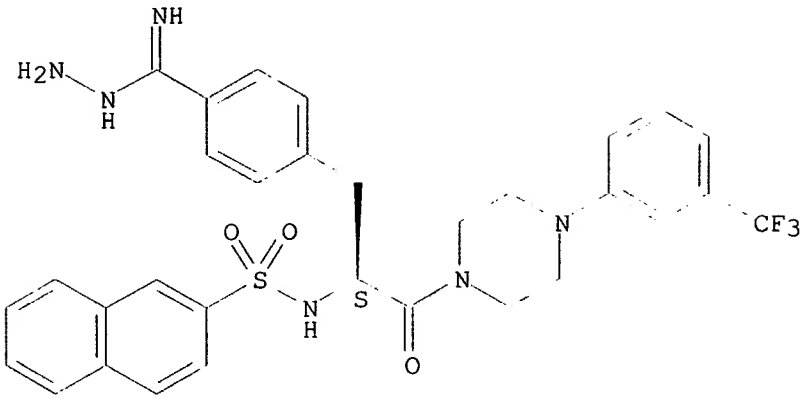
RN 184771-35-5 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-(4-phenyl-1-piperazinyl)propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



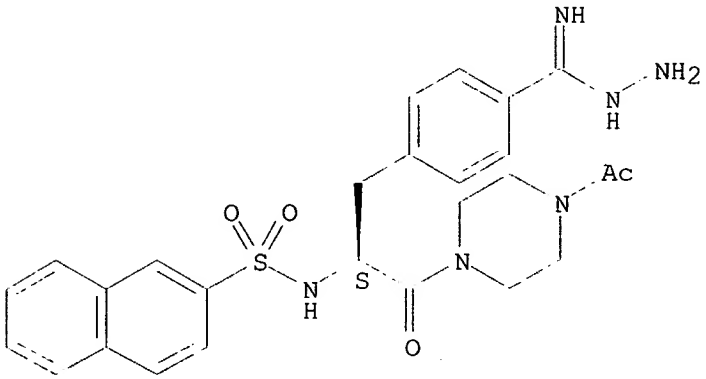
RN 184771-36-6 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-2-[(2-naphthalenylsulfonyl)amino]-3-oxo-3-[4-[3-(trifluoromethyl)phenyl]-1-piperazinyl]propyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



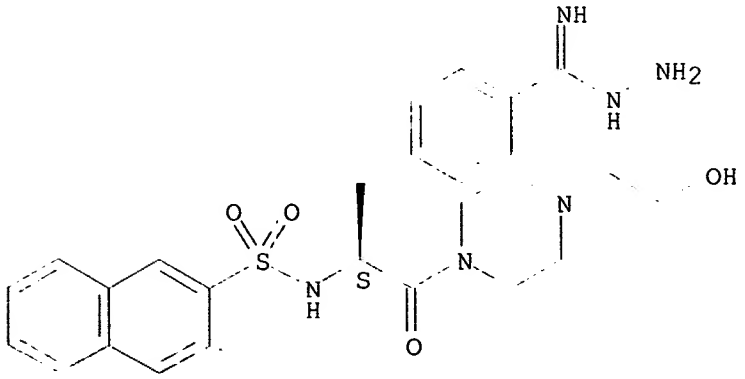
RN 184771-37-7 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-(4-acetyl-1-piperazinyl)-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



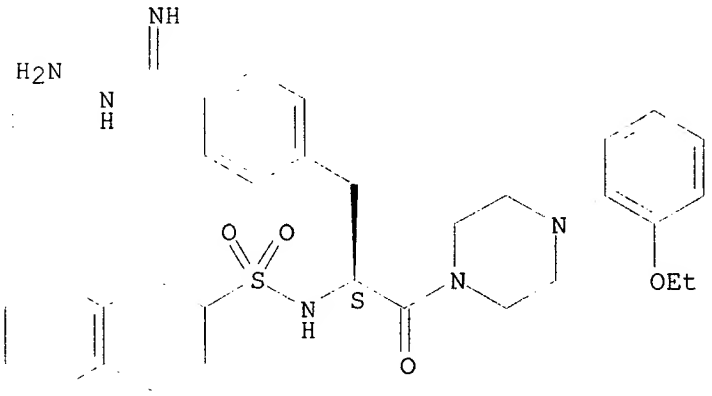
RN 184771-38-8 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-hydroxyethyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 184771-39-9 USPATFULL
CN Benzenecarboximidic acid, 4-[(2S)-3-[4-(2-ethoxyphenyl)-1-piperazinyl]-2-[(2-naphthalenylsulfonyl)amino]-3-oxopropyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L47 ANSWER 21 OF 23 USPATFULL

ACCESSION NUMBER:	95:75738 USPATFULL
TITLE:	Fibrin-targeted inhibitors of thrombin
INVENTOR(S):	Haber, Edgar, Salisbury, NH, United States Bode, Christoph, Heidelberg, Germany, Federal Republic of Runge, Marschall S., Atlanta, GA, United States
PATENT ASSIGNEE(S):	President and Fellows of Harvard College, Cambridge, MA, United States (U.S. corporation) Emory University, Atlanta, GA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5443827		19950822	
APPLICATION INFO.:	US 1993-58699		19930503	(8)

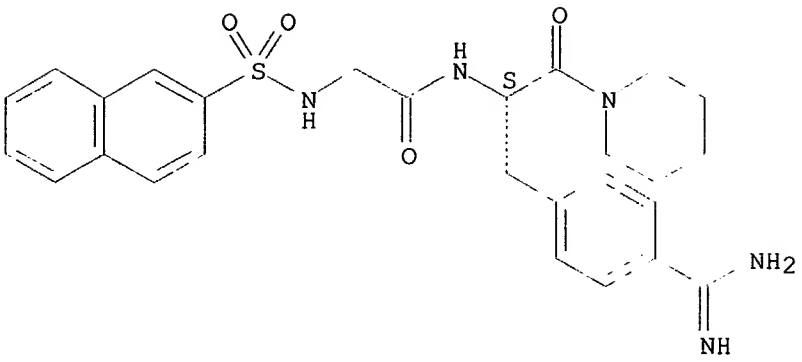
DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Lacey, David L.
ASSISTANT EXAMINER:	Loring, Susan A.
LEGAL REPRESENTATIVE:	Fish & Richardson
NUMBER OF CLAIMS:	14
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	13 Drawing Figure(s); 7 Drawing Page(s)
LINE COUNT:	1060

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A chimeric molecule that contains a fibrin-binding portion of an antibody covalently linked to an inhibitor of thrombin, which molecule is administered to inhibit thrombus formation and growth.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **86845-59-2D**, conjugates with anti-fibrin antibodies (fibrin-binding antibody-thrombin inhibitor chimeric mols. and their use as antithrombotics)
RN 86845-59-2 USPATFULL
CN Acetamide, N-[(1S)-1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L47 ANSWER 22 OF 23 DRUGU COPYRIGHT 2002 THOMSON DERWENT
ACCESSION NUMBER: 1992-51554 DRUGU C
TITLE: Refined 2.3 Angstroms X-ray Crystal Structure of Bovine Thrombin Complexes Formed With the Benzamidine and Arginine-Based Thrombin Inhibitors NAPAP, 4-TAPAP and MQPA. A Starting Point For Improving Antithrombotics.
AUTHOR: Brandstetter H; Turk D; Wolfgang Hoeffken H; Grosse D; Sturzebecher J; Martin P D
CORPORATE SOURCE: Basf
LOCATION: Martinsried, Ludwigshafen, Erfurt, Germany,West; Detroit, Michigan, United States
SOURCE: J.Mol.Biol. (226, No. 4, 1085-1099, 1992) 10 Fig. 5 Tab. 59 Ref.
CODEN: JMOBAK ISSN: 0022-2836
AVAIL. OF DOC.: Max-Planck-Institut fuer Biochemie, W-8033 Martinsried, Germany. (Bode W, 8 authors).
LANGUAGE: English
DOCUMENT TYPE: Journal

ABSTRACT:

The X-ray crystal structures of complexes formed between bovine thrombin with the inhibitors NAPAP (N-alpha-(2-naphthyl sulfonylglycyl)-DL p-amidino-phenylalanyl piperidine), 4-TAPAP (N-alpha-(4-toluene sulfonyl)-DL p-amidinophenylalanyl piperidine) and MQPA ((2R,4R)-4-methyl-1 (N-alpha-((RS)-3-methyl 1,2,3,4-tetrahydro 8-quinolenesulfonyl) L-arginyl) 2-piperidine carboxylic acid) were described. The crystal structures provide starting points for anti-thrombotic design.

SECTION HEADING: C Chemistry

CLASSIF. CODE: 18 Hematological
38 Structure/Activity
71 Medicinal Chemistry

CONTROLLED TERM:
BENZAMIDINE *RC; STRUCT.ACT. *FT; CRYSTAL *FT; DRUG-DESIGN *FT; COMPLEX *FT; ANTIAGGREGANT *FT; X-RAY-DIFFRACTION *FT; IN-VITRO *FT; CRYSTALLOGRAPHY *FT
[01] SULFONAMIDE *FT; AMINOACID *FT; ARALKYLAMINE *FT; C-AMIDE *FT; PIPERIDINE *FT; AMIDINE *FT; QUINOLINE *FT; GUANIDINE *FT; POLYAMINE *FT; OC *FT

[02] NAPAP *OC; NAPAP *RN; OC *FT
CAS REGISTRY NO.: **121505-20-2**
FIELD AVAIL.: AB; LA; CT; MPC
FILE SEGMENT: Literature

L47 ANSWER 23 OF 23 DRUGU COPYRIGHT 2002 THOMSON DERWENT
ACCESSION NUMBER: 16072 DRUGU
FILE SEGMENT: Registry
DERWENT DRUG REGISTRY NAME: NAPAP
DERWENT DRUG NAME: NAPAP
CAS REGISTRY NUMBER: **121505-20-2**
CONTROLLED TERM: ANTICOAGULANTS
SUBSTRUCTURE TERM: NAPHTHALENE; SULFONAMIDE; AMINOACID; C-AMIDE; PIPERIDINE; ARALKYLAMINE; AMIDINE
MULTIPUNCH CODE: 02& *G; 02- *G; 021 *G; 03& *G; 03- *G; 034 *G; 06& *G; 060 *G; 071 *G; 093 *G; 096 *G; 10- *G; 100 *G; 102 *G; 11& *G; 11- *G; 110 *G; 115 *G; 123 *G; 126 *G; 13& *G; 133 *G; 178 *G; 20- *G; 201 *G; 207 *G; 210 *G; 216 *G; 23& *G; 23- *G; 235 *G; 237 *G; 239 *G; 26& *G; 26- *G; 265 *G

=> fil reg; s 121505-20-2; d ide; fil hom
FILE 'REGISTRY' ENTERED AT 10:46:28 ON 14 AUG 2002
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STRUCTURE FILE UPDATES: 12 AUG 2002 HIGHEST RN 443729-39-3
DICTIONARY FILE UPDATES: 12 AUG 2002 HIGHEST RN 443729-39-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

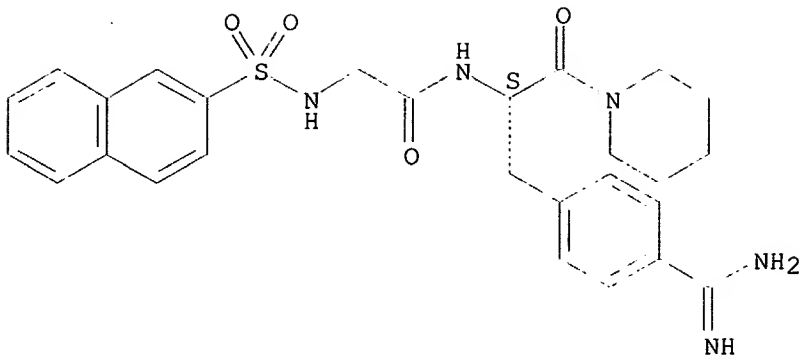
Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

L48 1 121505-20-2
(121505-20-2/RN)

L48 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **121505-20-2** REGISTRY
CN Acetamide, N-[1-[[4-(aminoiminomethyl)phenyl]methyl]-2-oxo-2-(1-piperidinyl)ethyl]-2-[(2-naphthalenylsulfonyl)amino]-, monosodium salt, (S)- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN NAPAP
FS STEREOSEARCH
MF C27 H31 N5 O4 S . Na
SR CA
LC STN Files: BIOBUSINESS, CA, CAPLUS, CEN, CIN, DDFU, DRUGU, PIRA
CRN (86845-59-2)

Absolute stereochemistry.



● Na

1 REFERENCES IN FILE CA (1967 TO DATE)
1 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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=> fil medl; d que nos l34; fil embase; d que nos l43; fil hom
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 FILE LAST UPDATED: 13 AUG 2002 (20020813/UP). FILE COVERS 1958 TO DATE.

 On June 9, 2002, MEDLINE was reloaded. See HELP RLOAD for details.

 MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the
 MeSH 2002 vocabulary. Enter HELP THESAURUS for details.

 THIS FILE CONTAINS CAS REGISTRY NUMBERS FOR EASY AND ACCURATE
 SUBSTANCE IDENTIFICATION.


L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L26            8 SEA FILE=REGISTRY ABB=ON  L3 AND MEDLINE/LC
L27           50 SEA FILE=MEDLINE ABB=ON  L26
L28         3898 SEA FILE=MEDLINE ABB=ON  PEMPHIGUS+NT/CT
L29         7507 SEA FILE=MEDLINE ABB=ON  URINARY PLASMINOGEN ACTIVATOR/CT
L30        87925 SEA FILE=MEDLINE ABB=ON  NEOPLASM METASTASIS+NT/CT
L31       268630 SEA FILE=MEDLINE ABB=ON  CARCINOMA+NT/CT
L32       112639 SEA FILE=MEDLINE ABB=ON  BREAST NEOPLASMS+NT/CT
L33        25965 SEA FILE=MEDLINE ABB=ON  PANCREATIC NEOPLASMS+NT/CT
L34            0 SEA FILE=MEDLINE ABB=ON  L27 AND (L28 OR L29 OR L30 OR L31 OR
                 L32 OR L33)


FILE 'EMBASE' ENTERED AT 10:47:51 ON 14 AUG 2002
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 FILE COVERS 1974 TO 8 Aug 2002 (20020808/ED)

 EMBASE has been reloaded. Enter HELP RLOAD for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


L1              STR
L3          1056 SEA FILE=REGISTRY SSS FUL L1
L35            3 SEA FILE=REGISTRY ABB=ON  L3 AND EMBASE/LC
L36           40 SEA FILE=EMBASE ABB=ON  L35
L37          793 SEA FILE=EMBASE ABB=ON  PEMPHIGUS/CT
L38         9182 SEA FILE=EMBASE ABB=ON  UROKINASE/CT
L39        96199 SEA FILE=EMBASE ABB=ON  METASTASIS+NT/CT
L40       254516 SEA FILE=EMBASE ABB=ON  CARCINOMA+NT/CT
L41        92724 SEA FILE=EMBASE ABB=ON  BREAST CANCER+NT/CT
L42        14822 SEA FILE=EMBASE ABB=ON  PANCREAS CANCER+NT/CT
L43            0 SEA FILE=EMBASE ABB=ON  L36 AND (L37 OR L38 OR L39 OR L40 OR
                 L41 OR L42)


FILE 'HOME' ENTERED AT 10:47:51 ON 14 AUG 2002
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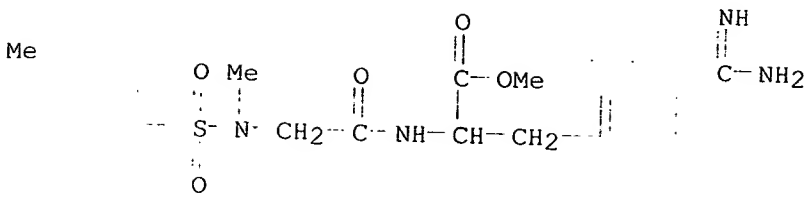
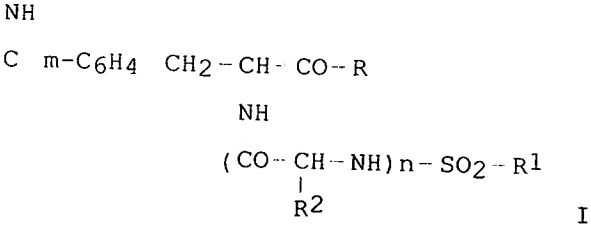


REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L47 ANSWER 8 OF 23 CAPLUS COPYRIGHT 2002 ACS
ACCESSION NUMBER: 2000:230194 CAPLUS
DOCUMENT NUMBER: 132:222869
TITLE: Preparation of 3-amidinophenylalanine peptides for use as **urokinase** inhibitors
INVENTOR(S): Wikstroem, Peter
PATENT ASSIGNEE(S): Pentapharm A.-G., Switz.
SOURCE: Patentschrift (Switz.), 7 pp.
CODEN: SWXXAS
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CH 689611	A	19990715	CH 1995-581	19950301

OTHER SOURCE(S): MARPAT 132:222869
GI



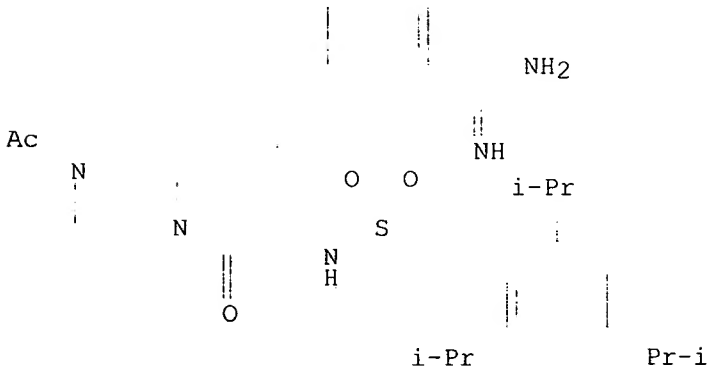
I

AB Title compds. [(I); R = OH, O-(cyclo)alkyl, O-arylalkyl, PhCH2, Ph(CH2)2, substituted pyrrolidine, piperidine, piperazine, NR3R4; R3, R4 = (independently) H, (un)branched alkyl, (un)substituted aralkyl, PhCH2, Ph(CH2)2, cycloalkyl-alkyl; R3 = H, R4 = NHR5; R5 = (hetero)aryl; R1 = (un)branched alkyl, (un)substituted (hetero)aryl; R2 = H, (un)branched alkyl; n = 0-1] as L-,D-, or DL forms, were prepd. for use as urokinase inhibitors for the treatment of tumors or in diagnosis. Thus, (L)-3-cyanophenylalanine Me ester hydrochloride was N-protected with 2,4,6-triisopropylphenylsulfonyl chloride, deesterified, condensed with 1-ethoxycarbonyl-piperazine, and the cyano group converted to the amidine (via conversion to thioamide and reaction with MeI to give thioimide Me ester, which was then reacted with ammonium acetate), to give I [R = 4-ethoxycarbonyl-piperazine; R1 = 2,4,6-triisopropylphenyl; n = 0 (II)]. In in vivo tests of urokinase inhibition, II had Ki 0.49 .mu.mol/l.

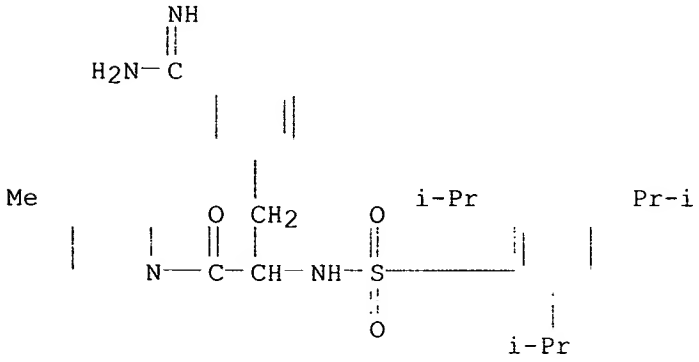
IT **161357-71-7P 169388-44-7P 220355-61-3P**
220355-63-5P 220355-64-6P 222842-26-4P
255374-84-6P 255374-90-4P 256430-86-1P
256430-96-3P 261158-90-1P 261158-91-2P

261158-92-3P 261158-93-4P 261158-95-6P
261158-96-7P 261628-59-5P 261628-61-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 3-amidinophenylalanine peptides for use as **urokinase** inhibitors)

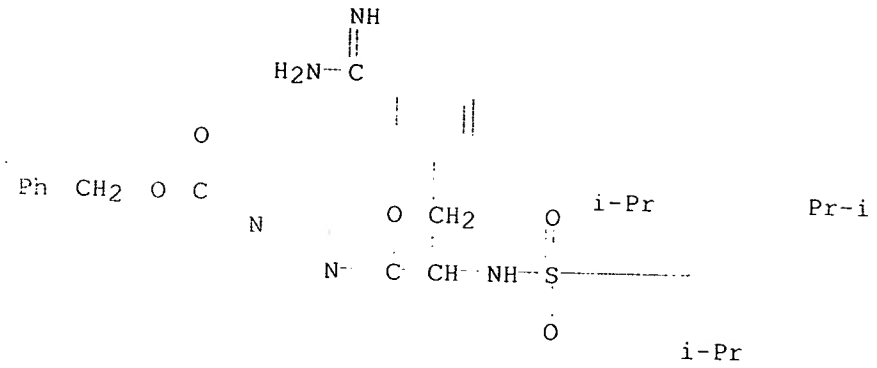
RN 161357-71-7 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]- (9CI) (CA INDEX NAME)



RN 169388-44-7 CAPLUS
CN Piperidine, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-4-methyl- (9CI) (CA INDEX NAME)

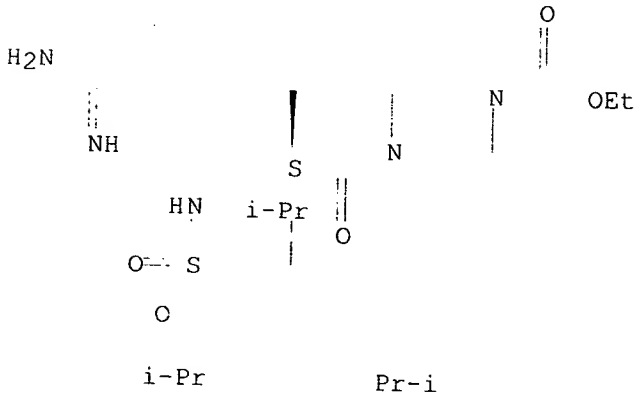


RN 220355-61-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

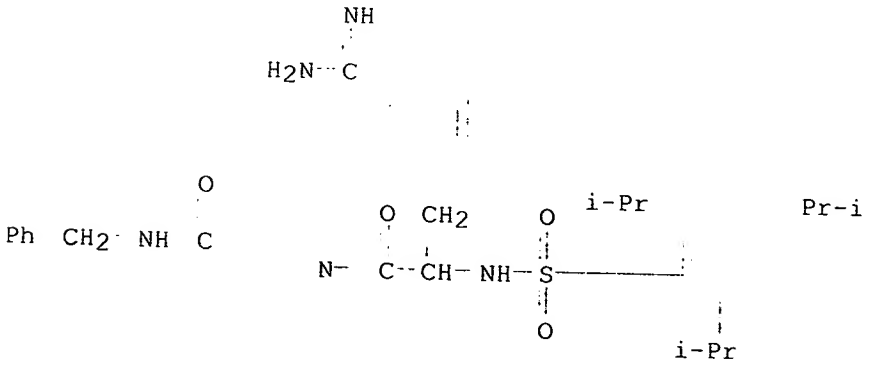


RN 220355-63-5 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



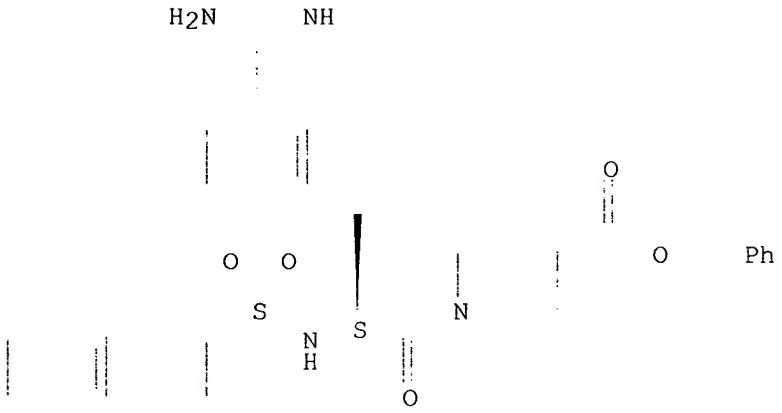
RN 220355-64-6 CAPLUS
CN 3-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 222842-26-4 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-

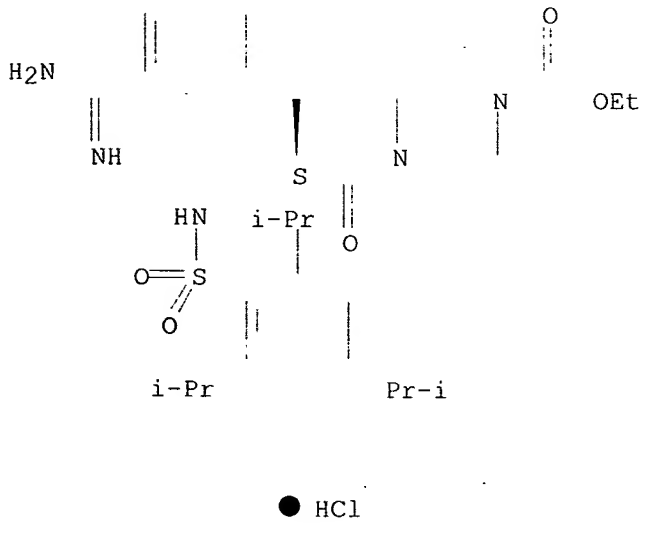
naphthalenylsulfonyl)amino]-1-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



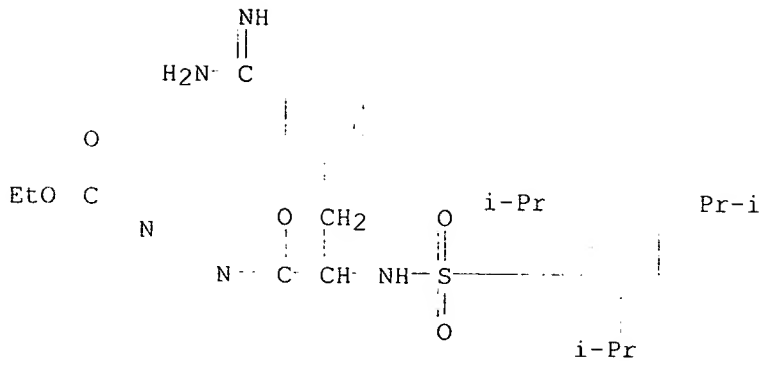
RN 255374-84-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[(2S)-3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry.

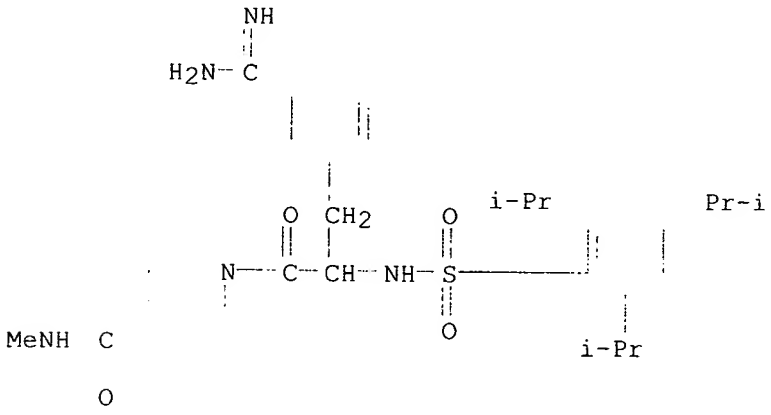


● HCl

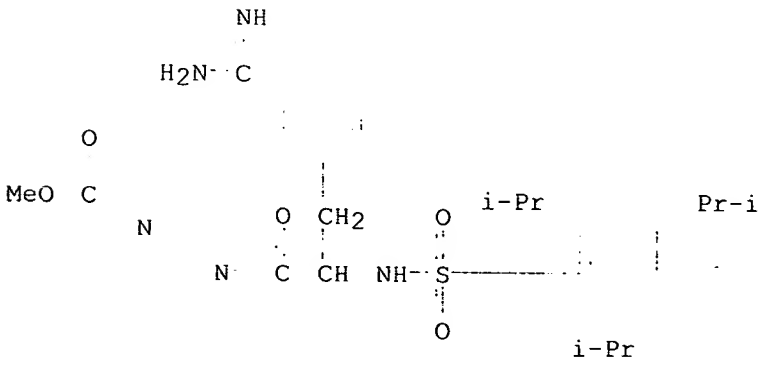
RN 255374-90-4 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester (9CI) (CA INDEX NAME)



RN 256430-86-1 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-methyl- (9CI) (CA INDEX NAME)

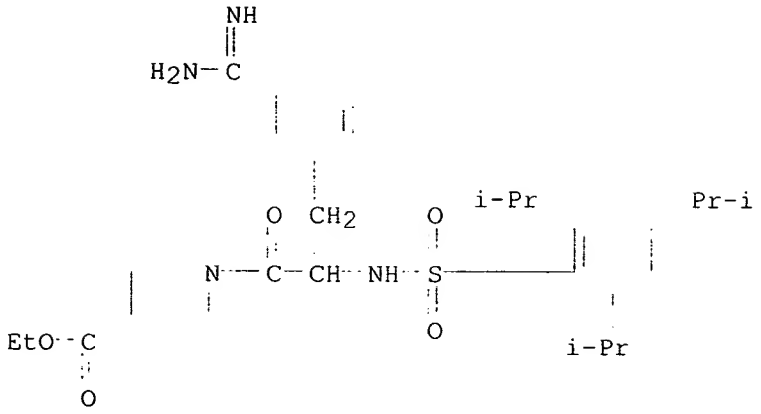


RN 256430-96-3 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, methyl ester (9CI) (CA INDEX NAME)

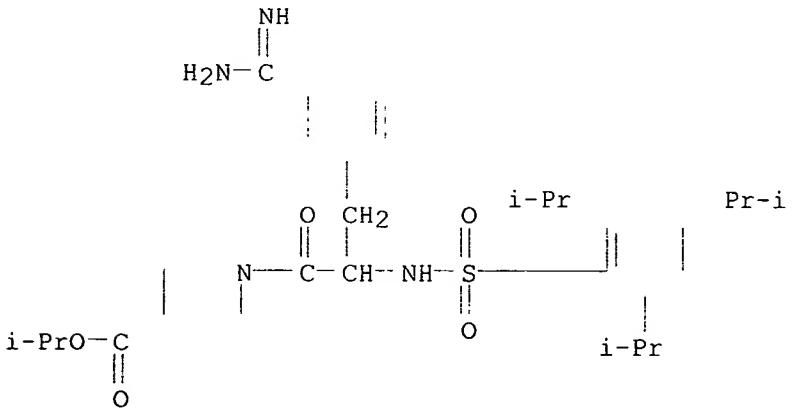


RN 261158-90-1 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, ethyl ester

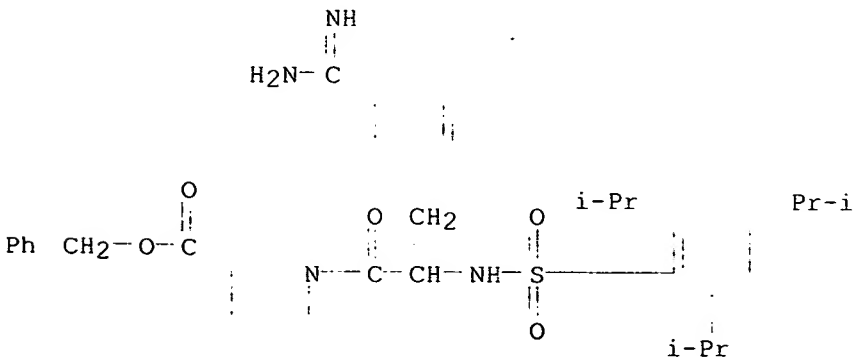
(9CI) (CA INDEX NAME)



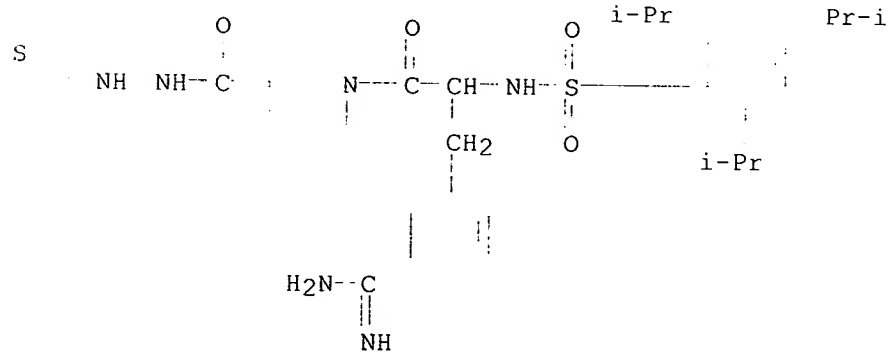
RN 261158-91-2 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 1-methylethyl ester (9CI) (CA INDEX NAME)



RN 261158-92-3 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

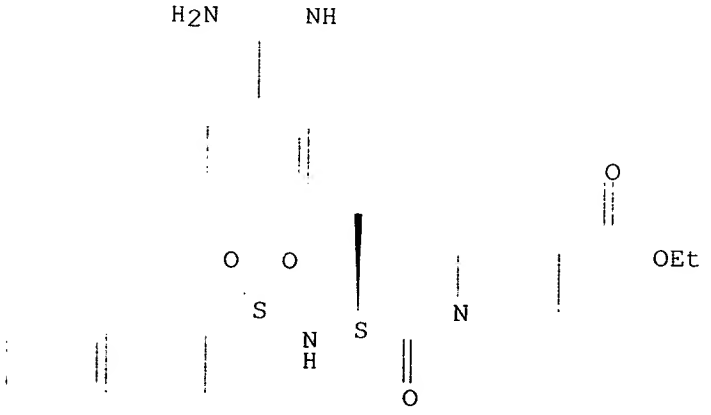


RN 261158-93-4 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, 2-(2-thienyl)hydrazide (9CI) (CA INDEX NAME)

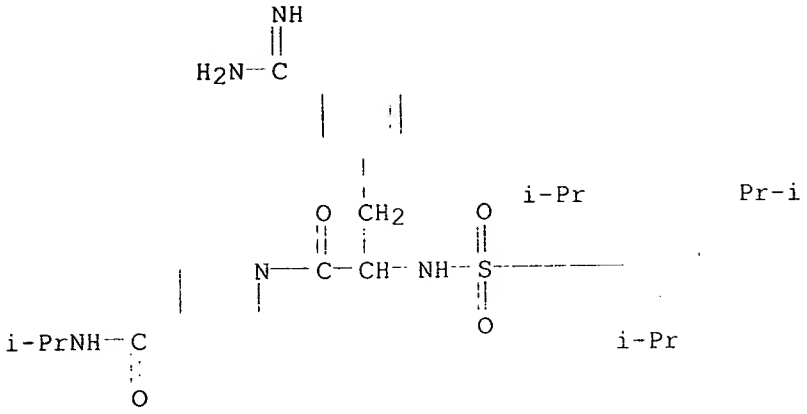


RN 261158-95-6 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[(2S)-3-[3-(aminoiminomethyl)phenyl]-2-[(2-naphthalenylsulfonyl)amino]-1-oxopropyl]-, ethyl ester (9CI) (CA INDEX NAME)

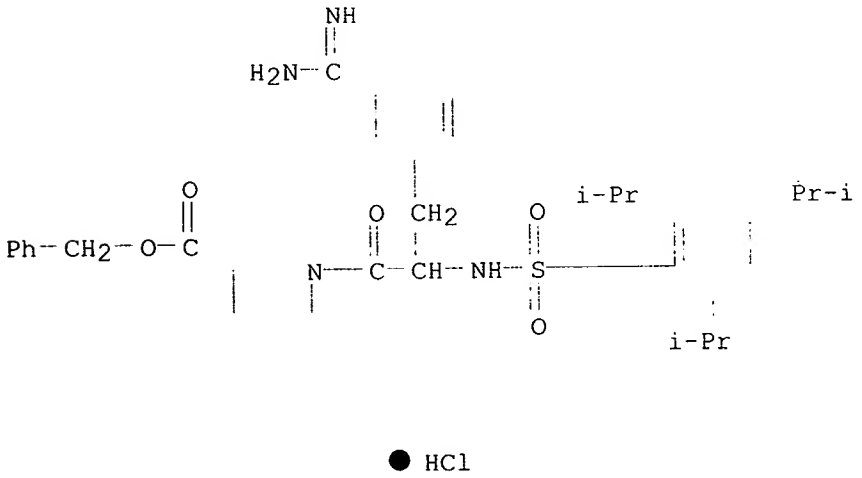
Absolute stereochemistry.



RN 261158-96-7 CAPLUS
CN 4-Piperidinecarboxamide, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 261628-59-5 CAPLUS
CN 3-Piperidinecarboxylic acid, 1-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-, phenylmethyl ester, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 261628-61-9 CAPLUS
CN 1-Piperazinecarboxamide, 4-[3-[3-(aminoiminomethyl)phenyl]-1-oxo-2-[[[2,4,6-tris(1-methylethyl)phenyl]sulfonyl]amino]propyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)